

Teacher Evaluation Practices in Alberta

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AN ASSESSMENT OF FORMAL TEACHER EVALUATION
PRACTICES IN ALBERTA

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LAKELAND (PUBLIC) SCHOOL DISTRICT #5460

Under Contract to Alberta Education, Edmonton, Alberta

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ABSTRACT

This study investigated the formal teacher evaluation practices of superintendents, other central office staff, and principals.

A questionnaire collected data on their evaluation practices between September 1983 and April 1984: (1) demographic data on the responding evaluator; (2) data related to initiating factors, purposes, and outcomes of their last teacher evaluation; and (3) data on the evaluative procedures they used in that evaluation.

Experts in "due process" and "improvement of instruction" adjudicated items in part 3 to establish minimum criteria for satisfactory evaluation.

Respondents generally placed a high priority on teacher evaluation, but had inadequate time.

Less than half of the respondents followed board policy "strictly to the letter." Two-thirds of the respondents gave a positive rating to the last teacher evaluated.

Of the teachers evaluated, 60.8% were tenured, and 39.2% were first year teachers, or new to the school/system. Junior high teachers comprised the largest group evaluated, and language arts and math were the subjects most observed.

The majority of evaluations were initiated as routine evaluations, with primary purposes to: improve the teacher's performance, award a permanent contract, provide a

basis for retention in position, or recommend permanent certification. As a result, most teachers were retained in their present position, received a permanent contract, or were recommended for permanent certification.

Very few of the respondents (4.5%) met the minimum criteria to assure due process and fewer (1.3%) met the criteria for improvement of instruction.

The completeness of the evaluation (i.e., score on part 3 of the questionnaire) correlated positively with time spent in classroom observation, number of observation visits, priority of teacher evaluation, and number of related university courses.

Where the purpose or outcome of the evaluation related to inservice needs, the completeness of the evaluation correlated positively with the purpose or outcome.

Where the purpose or outcome of the evaluation related to a recommendation for permanent certification, the completeness of the evaluation correlated negatively with the purpose or outcome.

No relationship was found between the presence of a written policy on formal teacher evaluation and the completeness of the evaluation, nor was the level of adherence to policy significantly related to completeness.

CHAPTER I

INTRODUCTION

Evaluation in education is universally endorsed, widely misunderstood, poorly planned, crudely implemented, haphazardly staffed, and even ignored when the results are in! Nonetheless, supervisors are coming to accept responsibility for the evaluation task by recognizing that it is essential for guiding the improvement of instruction process. (Harris, 1985, p. 189)

In December 1982, James Keegstra, a social studies teacher at the Eckville High School, Eckville, Alberta was dismissed from his position as a teacher in that school. At a subsequent Board of Reference hearing held in the Judicial District of Edmonton in April 1983, it came to light that Keegstra had, for a protracted period, been teaching a social studies program which differed substantially from the authorized Alberta curriculum and which was perceived to be anti-Jewish in content. It was adequately demonstrated that Keegstra's students had accepted, as fact, the distorted and biased view of history which had been presented to them (Keegstra v. County of Lacombe, 1983, pp. 19-21).

The Keegstra case naturally attracted a great deal of attention in the educational community and among the general public. Subsequently, the Honourable David King, Minister of Education, established a Minister's Consultative Committee on Tolerance and Understanding.

Ron Ghitler, the Chairman of the Minister's Committee, in addressing delegates at the Alberta School Trustees' Association Convention on November 29, 1983 in Calgary, Alberta stated:

As unforgivable as the actions of the Eckville high school teacher (Jim Keegstra) may be, Eckville has raised our level of consciousness. In my view, Eckville illustrated an institutionalization of our educational system which has made it unresponsive and keeps it from acting in a responsive manner.

In my mind, Eckville raises the question again of teacher evaluation. . . . and the procedures utilized in this province with respect to discipline of teachers, termination of teachers, and the whole process of teacher standards, the encouragement and rewarding of teachers with merit, and the ridding from our system of teachers who are incompetent. . . .

I am aware of this association's concerns with respect to teacher evaluation. In many areas of this province, we have seen school boards who can proudly boast of evaluation programs within their systems that are thoughtful, that are fair, and are designed to ensure that they are acceptable, and I would speculate even welcomed by the teachers within the system.

Within other school boards in this province, we have experienced little in the way of effective evaluation. Within many jurisdictions, the teachers could go for seven to 10 years without ever being evaluated, if at all. . . .

Red herrings are dragged across the issue, with such discussion as who will do the evaluation, how can it be effective, why do we need evaluation when we can rely on the integrity of the individual teacher and on and on. . . .

But the fact remains that if standards are to be achieved and if teachers are to be recognized for the excellent work they do in our schools there must be a place for evaluation. (pp. 20-24)

Since 1970, the prime responsibility for teacher evaluation has rested with the local jurisdiction, and an

Alberta Education Evaluation Policy issued in May 1984 reiterated this position (Alberta Education, 1984, p. 66).

Studies conducted in 1977 (Holdaway, 1977; Reikie, 1977) found that, although some 83% of the 114 Alberta school jurisdictions surveyed evaluated teachers new to the system, tenured teachers were evaluated far less frequently. In fact, only 53% of jurisdictions evaluated tenured teachers on any kind of a scheduled basis (e.g., once every three years). A survey conducted by the Planning and Research Branch of Alberta Education in September 1980 showed that, at that time, 90% of school jurisdictions evaluated first year teachers but that 33% of jurisdictions had no scheduled basis for the evaluation of tenured teaching staff. The same study also indicated that, of those jurisdictions indicating that they had a written evaluation policy, only 55% reported that they carried out the policy.

The implications of these studies are far reaching. They suggest that, although policies may require teachers to be evaluated according to some fixed schedule, in practice this may not occur and thus it is entirely possible that a new teacher may be granted tenure without a formal evaluation of performance, and a tenured teacher may teach for many years without ever being formally evaluated.

Is formal evaluation necessary? Isn't a trained teacher in possession of an appropriate teaching credential

in the best position to judge his/her own performance?
Isn't an external evaluation of a teacher a frightening,
inhumane, and unnecessary experience for a highly trained
professional?

The Keegstra case amply demonstrates what can happen
when teachers are insufficiently monitored and Millman
(1981) aptly summarizes the point:

Teaching is not a solitary activity affecting no one.
On the contrary, the lives of many students are altered
in far-reaching and significant ways by the instructors
with whom they interact. Teaching is too important to
too many to be conducted without a critical inquiry
into its worth. Besides, court cases have made it
clear that students have rights, and schools and
colleges have a responsibility to ensure the quality of
their curriculum and instruction. The protection of
rights and the fulfillment of responsibility require
that teacher self-assessment be supplemented by
evaluation by others. (p. 12)

Alberta Education states that "Evaluation of teacher
performance is viewed as a vital component in ensuring that
quality educational programs are provided to Alberta
children" (1982, p. 8) and proposes eight purposes for
teacher evaluation:

1. To promote, achieve, and maintain an acceptable
quality of instruction.
2. To help improve performance of teachers in securing
desirable instructional outcomes.
3. To provide information which will be useful when
considering placement of staff, transfer,
retention, promotion, tenure, and permanent
certification.
4. To provide specific feedback concerning teacher
performance.

5. To provide professional assistance to teachers in the performance of teaching tasks.
6. To provide a basis for planning in-service programs.
7. To provide written evaluation reports on teachers in public and private schools for purposes of documentation, as required.
8. To assist teachers in professional growth and development. (p. 8)

Of these purposes, items 1, 2, 4, 5, 6, and 8 essentially relate to the quality or improvement of instruction and items 3 and 7 refer to the documentation functions of evaluation.

The Holdaway (1977) and Reikie (1977) studies showed that in 1977, school jurisdictions used evaluation primarily for documentation: the awarding of permanent contracts (94%), recommendation for permanent certification (96%), and providing a basis for dismissal (83%). Evaluation was used to assist in improving teacher performance in only 18% of school jurisdictions.

The Alberta Education study of 1980 showed a marked change in the focus of teacher evaluation in a number of areas. Certification and the awarding of a permanent contract remained primary uses (90%), but use for the improvement of instruction had risen from 18% in 1977 to 83% in 1980.

Thus, we see the two major purposes for evaluation in Alberta, (1) the improvement of instruction, commonly called

formative evaluation and (2) documentation for the purpose of staff placement, retention, transfer, promotion, tenure, and permanent certification, commonly called summative evaluation. In the former case, the evaluation strategies should be congruent with those that lead to improved performance, and in the latter case the evaluation practices must be fair and reasonable and allow the teacher "due process."

This situation is reflected in Alberta Education's Teacher Evaluation Policy which states that teachers will be evaluated to "assist in the provision of effective instruction to students and in the professional growth and development of teachers" (Alberta Education, 1984, p. 66). The policy requires that the results of the evaluation be used:

1. to assist in the professional development of teachers and,
2. to take appropriate action with respect to teachers whose performance is unacceptable.

In addition, the policies developed by School Boards should be fair and consistent and provide for due process.

A comparison of the results of the Holdaway (1977) and Reikie (1977) studies with those of the Alberta Education study indicated a distinct change in the emphasis in teacher evaluation. However, both studies sought to establish the current situation in Alberta by questioning School Superintendents on the policies and practices of their

jurisdiction in preparing formal evaluations of teachers. These studies were limited in that they recorded only the superintendent's perceptions of the situation and Reikie (1977) regards this as a "significant limitation" to his study and suggests:

Future studies might examine teacher evaluation policies and practices from the perspective of other personnel involved in the evaluation process such as school principals, teachers and other central office personnel. (p. 95)

He also suggests that:

More specific descriptive information might initiate the development of viable proposals for change and improvement. (p. 56)

Clearly a situation exists in Alberta in which the actual "on site" evaluation practices are largely undocumented, and the current available data are limited to superintendents' perceptions. The situation has led to a renewed public and political interest in, and pressure for, increased monitoring of teachers.

The Alberta School Trustees' Association and the Alberta Teachers' Association have recent, or recently revised, position papers on teacher evaluation or performance appraisal; and Alberta Education has recently (May 1984) introduced a set of evaluation policies which include teacher evaluation.

It is abundantly clear that all concerned parties in Alberta are ready for a change, but a change from what? Before any meaningful change in teacher evaluation practices

can be initiated, a thorough understanding of the status quo is necessary. As Reikie (1977) said, "A great need exists for a proportionately larger volume of research of an empirically descriptive nature" (p. 2).

The Purpose of the Study

The primary purpose of this study was to describe the state of formal teacher evaluation in Alberta in the 1983-1984 school year. The specific aims were:

1. to collect demographic information about the evaluators and teachers involved in formal teacher evaluation in Alberta.
2. To describe the initiating factors, intended purposes, and outcomes of formal teacher evaluation.
3. To describe the procedures used by evaluators in formally evaluating teachers.
4. To analyze the completeness of the teacher evaluation procedures used by evaluators in Alberta with respect to:
 - (a) the improvement of instruction.
 - (b) due process requirements.
5. To identify the relationships between demographic factors and the completeness of evaluation.

Justification for the Study

The Keegstra Case has, as Ghitter stated, "raised our

level of consciousness" (1983, p. 20) with respect to what happens in the classroom. The case demonstrated, all too clearly, the inadequacy of some of the teacher evaluation practices in Alberta.

Judicious practice would suggest that School Boards in Alberta should have written policy on teacher evaluation, and Alberta Education, in May 1984, published policies which will require that each school jurisdiction "develop and adopt written policies, guidelines and procedures" (p. 66) for the evaluation of teachers.

This study is justified on the basis that it will provide information to Alberta Education, School Boards, administrators, teachers, professional organizations, and the public at large. That information is important because it can provide a basis for decision making in the areas of policy making, in service training, and in the implementation of more effective teacher evaluation practices.

Assumptions

The following assumptions were made:

1. Responses to the study were made in good faith.
2. The questions on the questionnaire were not interpreted ambiguously.
3. The data received on the questionnaires accurately reflected the beliefs and practices of the respondents.

4. The last formal teacher evaluation carried out by each of the respondents was typical of their usual evaluative practice.

Limitations

1. The study reflected the evaluative practices only as they applied to the formal evaluation of teachers in Alberta during the period September 1, 1983 to April 30, 1984.

2. The study reflected the evaluative practices only to the extent that "the last formal teacher evaluation carried out" exemplified the normal evaluative practice of each respondent.

Definition of Terms

Alberta Education. Alberta Education is that branch of the Alberta Provincial Government responsible for the provision of educational services at the primary, elementary, and secondary levels.

Board. Board means a board of trustees of a district or division.

Board of Reference. Board of Reference means the appeal body established pursuant to sections 95 to 99 of The School Act.

Conference of Alberta School Superintendents.
Conference of Alberta School Superintendents means that

organization whose membership consists of superintendents and other central office staff who are not full members of the Alberta Teachers Association.

County. County means those school districts under the jurisdiction of a County Council pursuant to The County Act.

County Act. County Act means Chapter C-27 of the Revised Statutes of Alberta 1980.

District. District means a school district established pursuant to The School Act.

Division. Division means a school division (consisting of any number of school districts) established pursuant to The School Act.

Formal Evaluation. Formal evaluation means an evaluation of a teacher that includes a written report leading to a recommendation or rating.

Other Central Office Staff. Other central office staff means those people employed by a school jurisdiction who were members of the Conference of Alberta School Superintendents as of December 1983.

Public School District. Public School District means a school district established pursuant to The School Act.

School Act. School Act means Chapter S-3 of the Revised States of Alberta 1980.

School Jurisdiction. School jurisdiction means a public school district or division, a separate school district, or a County.

Separate School District. Separate school district means a school district established pursuant to The School Act. Separate school districts may be formed within the boundaries of, or co-terminus with public school jurisdictions. If the public school jurisdiction is a non-Catholic jurisdiction, the separate district will provide a Roman Catholic education--and vice versa. The majority of separate school districts in Alberta are Roman Catholic.

Superintendent. Superintendent means the Superintendent of Schools of a school jurisdiction appointed by a Board pursuant to The School Act.

Teacher means a person who holds a certificate of qualification issued under the Department of Education Act and is employed by a school jurisdiction to instruct students in a school.

Tenured Teacher. Tenured teacher means a teacher who has been granted a continuous contract pursuant to The School Act.

CHAPTER II

REVIEW OF SELECTED LITERATURE

The critics of the educational establishment are far from ready to see the abandonment of overt appraisals of teaching performance. There remains a strong feeling that formal evaluation is an essential guarantee that standards will be maintained. In actual fact, however, such a belief is largely illusory. (Fleming, 1971, p. 445)

The central purpose of this study is to describe the state of teacher evaluation in Alberta, and to this end, this review of the literature will focus upon the research related to supervisory and evaluative processes.

Evaluation and Supervision Defined

The literature contains a plethora of definitions of supervision and evaluation and the line dividing the meaning of these two terms is unclear.

Some of the very early definitions of supervision such as those cited by Barr, Burton and Brueckner (1947) were meaningless and today seem quite humorous: "the business of the supervisor is to cast a genial influence over his schools, but otherwise he is not to interfere with the work" or "supervision is the vision in the old and beautiful sense of seeing things invisible."

Many of the more recent definitions of supervision

relate to its function in the improvement of instruction (Acheson & Gall, 1980; Alberta Education, 1984; Alberta Teachers' Association, 1980; Burton, 1922; Burton & Brueckner, 1955; Harris, 1975; Spears, 1953) yet many of the same authors acknowledge the need for supervisors to make judgements about the performance of a teacher and include this within their definition. For instance, Burton (1922) includes the rating of teachers in his definition and Acheson and Gall (1980) include the evaluation of teachers for promotion, tenure, or other decisions as one of their goals for clinical supervision.

Since the terms supervision and evaluation are often used synonymously in the literature, this review will examine the writing from that perspective.

The Evolution of Evaluation

Historically the philosophy underlying evaluation has undergone a number of significant changes. Burton and Brueckner (1955) describe the selection of teachers in the Massachusetts Bay Colony in 1654 wherein town selectmen secured teachers of "certain religious and moral qualities." By the early 1700s, inspection had appeared and, in Boston, committees of citizens were appointed to visit and inspect the schools.

Towns grew and schools increased in size until several teachers were working in one building. This resulted in the

establishment of the "principal teacher" who performed certain administrative and managerial functions. However, the supervisory functions were not delegated to principals until much more recently. By the middle of the nineteenth century the office of "superintendent of schools" had appeared and, while in some cases he assumed supervisory responsibilities, school boards continued to retain most of the supervisory or inspectoral power.

Burton and Brueckner (1955), Lucio and McNeil (1962), and Wiles and Lovell (1967) identify a number of stages in the evolution of supervision in the twentieth century. The turn of the century saw supervision by specialists as new subjects were added to the curriculum. These supervisors were travelling teachers rather than lay people. Scientific supervision was the thrust of the 1920s. "Research and measurement were to be the domain of supervision. Teachers were to apply findings" (Lucio & McNeil, 1962).

During the 1930s and 40s, the emphasis was upon democratic supervision wherein the supervisor appealed to the feelings and emotions of the teacher to achieve the desired goals. In the late 1940s, this developed into a cooperative model in which the supervisory process was seen as: (1) the facilitation of interaction and mutual assistance among staff (Wiles & Lovel, 1967) and (2) the encouragement of wider participation of all the stakeholders in the educational endeavor in the formulation of mutually

accepted educational goals (Lucio & McNeil, 1962).

Lucio and McNeil (1962) describe the 1950s as the age of supervision through reason and intelligence which they describe as "The specification of desired outcomes and appropriate behavior necessary to their attainment . . . Action through wide participation of all concerned in the processes of inquiry and the judgement of outcomes" (p. 12).

During the 1960s, Amidon and Flanders (1963), Flanders (1964), and Amidon and Hunter (1966) were leaders in the development of strategies designed to gather observational data so as to provide teachers with meaningful information for the purpose of changing or reinforcing behavior. However, the most significant development in the supervision of teachers in the last twenty years is, according to Sullivan (1980), the growth of the clinical supervision model developed by Morris Cogan and Robert Goldhammer, a process which Reavis (1977) sees as combining the fundamental precepts of the humanistic approach, democratic practices and the scientific method.

Thus we have seen a dramatic change in the focus of evaluation, a change from the traditional inspectoral model to a more democratic, analytical model. Burton and Brueckner (1955, p. 13) use "prominent catch words" to differentiate between traditional and modern styles of supervision:

<u>Traditional</u>	<u>Modern</u>
1. Inspection.	1. Study and analysis.
2. Teacher-focussed.	2. Focussed on aim, method, pupil, and environment.
3. Visitation and conference.	3. Many diverse functions.
4. Random and haphazard, or a meager, formal plan.	4. Definitely organized and planned.
5. Imposed and authoritarian.	5. Derived and cooperative.
6. One person usually.	6. Many persons.

Thus:

Traditional supervision consists largely of inspection of the teacher by means of visitation and conference, carried on in a random manner, with directions imposed on the teacher by authority and usually by one person. Modern supervision, by contrast involves the systematic study and analysis of the entire teaching-learning situation utilizing a carefully planned program that has been cooperatively derived from the situation and which is adapted to the needs of those involved in it. (Burton & Brueckner, 1955, p. 13)

Purposes of Evaluation

The purposes of evaluation have been discussed by many researchers; as early as 1922 Burton (1922, pp. 9, 10) suggested that it dealt with the improvement of the teaching art and the improvement of teachers in service. Burton and Brueckner (1955) identify the purposes of supervision as "an expert technical service primarily aimed at studying and improving cooperatively all factors which affect child

growth and development" (p. 10) and Harris (1985) says that supervision "is what school personnel do with adults and things to maintain or change the school operation in ways that directly influence the teaching processes employed to promote pupil learning" (p. 10).

The Alberta School Trustees Association (1982) states "The major objective of the program (or performance appraisal) is desired and specified improvement in teaching performance" and Wiles and Lovell (1967) would also include the development of human relations in his purposes: "supervision consists of all the activities related to morale, improving human relations, inservice education, and curriculum development" (p. 5).

Acheson and Gall (1980) identify the major aim as the improvement of teachers' classroom instruction and, in addition, list the following specific goals of clinical supervision:

1. To provide teachers with feedback on the current state of their instruction.
2. To diagnose and solve instructional problems.
3. To help teachers develop skill in using instructional strategies.
4. To evaluate teachers for promotion, tenure and other decisions.
5. To help teachers develop a positive attitude about continuous professional development. (pp. 12-14)

Similarly, other authors have identified a variety of purposes. Alberta Education (1982) identified eight

purposes somewhat similar to those enumerated by Acheson and Gall (1980); Patterson (1974) and the Alberta Teachers' Association (1980a) identify two primary purposes:

1. For the improvement of the teacher's instructional performance and,
2. For judgemental functions related to decision making and teacher competency.

These two primary purposes may be categorized as formative and summative (Wittrock & Wiley, 1970; Cooley & Lohnes, 1976). Formative evaluations are performed with the intention of assisting teachers to improve their performance; summative evaluations culminate in reports which are used as a basis for judgementally rating the teachers.

Darling-Hammond, Wise, and Pease (1983), in an extensive review of the literature, identify four basic purposes for teacher evaluation: individual staff development, individual personnel (job status) decisions, school improvement, and school status (e.g., certification) decisions. They suggest that "many teacher evaluation systems are nominally intended to accomplish all four of these purposes, but different processes and methods are better suited to one or another of these objectives" (p. 302).

In general, teacher evaluation processes most suited to accountability purposes must be capable of yielding fairly objective, standardized, and externally defensible information about teacher performance. Evaluation processes useful for improvement objectives

must yield rich, descriptive information that illuminates sources of difficulty as well as viable courses for change. Teacher evaluation methods designed to inform organizational decisions must be hierarchically administered and controlled to ensure credibility and uniformity. Evaluation methods designed to assist decision making about individuals must consider the context in which the individual performance occurs to ensure appropriateness and sufficiency of data. (Darling-Hammond et al., 1983, p. 303)

Evaluation Processes

In discussing teacher evaluation, the Alberta School Trustees Association (1982) differentiates between teacher competence and teacher performance. "Competence, as defined by Webster, is 'having requisite or adequate ability or qualities; legally qualified or adequate.' Performance on the other hand, is defined as 'execution of an action; something accomplished'" (p. 1). The Association postulates that it is the performance area that should be the subject of teacher evaluation.

Medley (1982) suggests that teacher attributes may be categorized into teacher competency, teacher competence, teacher performance, and teacher effectiveness. Competency refers to any skill or piece of knowledge possessed by the teacher and relevant to the practice of teaching, competence relates to the competencies a teacher possesses, performance deals with what the teacher does on the job, and is situational in context, and effectiveness refers to the effect a teacher's performance has on students.

The processes used by evaluators to assess teacher competence, performance, and effectiveness are varied. Levin (1979) identified six methods of evaluating teachers. A similar, more comprehensive list of eight processes has been compiled by Darling-Hammond et al. (1984, pp. 304-308) and the main headings are presented here together with a condensed and paraphrased version of their descriptions.

1. Teacher Interviews. Teacher interviews or conferences have been widely used in the past and are an essential component of some of the modern evaluation strategies. In the past the interviews were often used for communicating performance appraisals or in the hiring or firing of teachers. Today, the involvement of teachers in preobservation conferences as well as postobservation interviews is seen as a useful tool in promoting professional growth.
2. Competency Tests. There is a growing trend for the use of standardized tests in the initial certification and hiring of teachers and an increasing belief that such tests have value for recertification and dismissal decisions. The most widely used test is the National Teacher Examination which is administered to as many as 75,000 teacher candidates in 24 states and 311 school districts each year.
3. Indirect Measures. Indirect measures include training, experience, commitment to extracurricular activities etc. and while such measures are linked to salary and promotion, there is no evidence to suggest that they differentiate between effective or ineffective teachers.
4. Classroom Observations. Coupled with teacher interviews or conferences, this method is undoubtedly the mainstay of current teacher evaluation practice. Holley and Evertson (1981, p. 90) say that classroom observation reveals "a view of the climate, rapport, interaction and functioning of a classroom available from no other source."

5. Student Ratings. Student ratings are commonly used at the college level and some authors believe that they could be applied at the secondary, and perhaps even at elementary levels. Some studies have shown a modest correlation between student ratings of teachers and student achievement, but questions about their validity and utility limit their acceptance.
6. Peer Review. In this process the teacher is evaluated by a committee of peers who examine the whole teaching assignment. Research in this area shows divergent results and the method is unsuitable for evaluations involving personnel decisions.
7. Student Achievement. Since the ultimate aim of teaching is student learning, it would seem reasonable to assess teacher competency or performance by measuring student achievement on test scores. Studies of the reliability of student test scores as a measure of teacher effectiveness consistently indicate that reliability is low (Brophy, 1973; Rosenshine, 1970).
8. Faculty Self Evaluations. Faculty self evaluation has joined other sources as a technique in teacher evaluation. The process is clearly unsuitable for accountability or personnel decisions but may have value in that it permits the teacher to assess his or her own strengths and weaknesses and may promote teacher professionalism. (condensed and paraphrased from Darling-Hammond et al., 1984, pp. 303-308)

The discussion above suggests that techniques available for evaluation serve a variety of purposes. Some seek to measure competence by testing the teacher, others rate performance through observational and interview strategies, while still others seek to measure teacher effectiveness by measuring the outcomes of teaching. The low levels of reliability of most of these measures tend to suggest that any single approach for assessing competence, performance,

or effectiveness is unlikely to provide a sound basis for useful teacher evaluation.

The Impact of Evaluation on Student Learning

If the avowed aim of evaluation or supervision is the improvement of instruction, then the evaluation of teachers should result in improved learning by students and with current high levels of interest in evaluation, one would expect to find many studies linking evaluation or supervision with student performance. However, Acheson and Gall (1980, p. 22) note that they were not able to find any recent research on student effects associated with clinical supervision, and searches of the ERIC, Dissertation Abstracts, and Psychological Abstracts indices by this researcher failed to reveal any studies more recent than those documented below.

Burton (1922, p. 8) cites "a pioneer study" carried out in 1919 in the Detroit Public Schools by Courtis and Barns which showed that the results in geography work, when measured with a standard test, were "markedly superior" in schools with a special supervisor, and that schools with ordinary supervision were superior to those having no supervision.

Barr et al. (1938, pp. 807-816) cite a number of controlled studies carried out in Detroit and rural Michigan in the 1920s. The studies showed dramatic differences in

student achievement in supervised and unsupervised schools. One study showed that in thirteen school functions, the students in the supervised schools "advanced approximately 194 per cent as far during the seven months . . . as did the children with whom they were compared." Another study, carried out in rural Michigan, using a variety of standardized tests in reading, language, spelling, and mathematics compared the gains of pupils in supervised and unsupervised schools. During the study period, September 1924 to May 1925, pupils in supervised schools showed gains of 170.8 per cent of a normal year of school work whereas pupils in unsupervised schools showed gains of 97 per cent. Similar studies carried out in Indiana and Louisiana showed similar results.

Teacher Effectiveness

Tied to the whole process of teacher evaluation is the question of what is successful teaching. For several decades researchers (e.g., Barr, 1958; Biddle & Elena, 1964; Bishop, 1981; Gough, Durflinger, & Hill, 1968; Medley, 1979; Rosenshine & Berliner, 1978) have attempted to identify those characteristics of teachers that make them successful. Hersh (1981), in a comprehensive review of the literature, defines effectiveness as "student academic achievement as measured by nationally normed, standardized achievement tests" and goes on to delineate the characteristics of

effective schools. He differentiates between two sets of conditions: Social Organization and Instruction and Curriculum. Under these broad headings he lists the attributes which pervade effective schools. In the Social Organization domain, effective schools have clear academic and social behavior goals, order and discipline, high expectations, public rewards and incentives, administrative leadership, community support, and a sense of pervasive caring and teacher efficacy. In the area of Instruction and Curriculum effective schools exhibit high academic learning time, frequent, monitored homework, frequent monitoring of student progress, a tightly coupled curriculum, a variety of teaching activities, and opportunities for student responsibility. Hersh indicates that while these factors individually have little impact on achievement as measured by standardized tests, together they create a "synergy of effect" wherein the whole is greater than the sum of the parts.

Berliner (1982) identifies similar factors as indicators of effective classroom instruction, namely: allocated time, engaged time, opportunity to learn, content coverage, curriculum/test congruence, and direct instruction. Medley and Crook (1982) list five tasks which distinguish more effective teachers from less effective teachers; they are: maintaining pupils' task involvement, teaching in large groups, minimizing disruptive behavior,

managing small group activities, and supervising pupil seatwork.

The elements of effective teaching that result in increased achievement on standardized tests are not necessarily those that result in creativity, problem solving ability, and complex cognitive learning; and Centra and Potter (1980) comment:

Higher order skills (e.g. inferential reasoning) are not particularly likely to be acquired (and certainly will not be demonstrated) by students whose teachers ask only lower order questions. (p. 285)

In addition, research by Horwitz, McKeachie and Kulik, Peterson, and Traub et al., cited by Darling-Hammond et al. (1984, p. 296), suggests that some of the desirable affective outcomes of education result from teaching behaviors that are different from those deemed useful in improving student scores on standardized tests.

While much of the recent research has focussed upon the teaching behaviors that are seen as effective for improving student performance on standardized tests, it can be seen that other teaching strategies leading to different outcomes may be deemed equally desirable, depending upon the educational goals. The question of educational goals is therefore critical to supervisory or evaluative processes. Once a set of educational goals has been established, then it is probable that the research on effective teaching can serve the purposes of teacher evaluation for, as Townsend

(1984) says, "Many of the typical measures of teacher effectiveness would appear to lend themselves to positive influence through the use of appropriate supervisory techniques" (p. 18).

Models of Teacher Evaluation

The earliest model of teacher evaluation was the inspectorial model which existed from the early 1700s until about fifty years ago (Burton & Brueckner, 1955). In the 1920s, the improvement of instruction emerged as the major objective of supervision and the period from 1920 was dominated by two models of supervision, the scientific model and the democratic model (Lucio & McNeil, 1962; Wiles & Lovell, 1967).

The last two decades have seen the emergence of several similar models, such as the Manatt and Redfern models, which involve the establishment of goals and some level of teacher involvement in the evaluative process. The Manatt "Mutual Benefit Evaluation" (Manatt, Palmer, & Hidlebaugh, 1976) involves the establishment of criteria; a diagnostic evaluation including preobservation conference, objective data gathering and a postobservation conference; the establishment of job targets; and a reevaluation.

Redfern (1980) developed a similar model based on the business model of "management by objectives." Like the Manatt model, the criteria are set by the responsible school

authority, but in the Redfern model, the teacher and evaluator jointly determine the individual objectives and the measurement process to be used.

The flexible, multigoal model which has achieved prominence today is the Clinical Supervision model developed by Goldhammer (1969) and Cogan (1973).

As clinical supervision has evolved from its beginnings, so a variety of definitions have evolved; however, Morris Cogan's (1973) definition captures the essence of the concept:

[Clinical supervision is] the rationale and practice designed to improve the teacher's classroom performance. It takes its principal data from the events of the classroom. The analysis of these data and the relationship between teacher and supervisor form the basis of the program, procedures, and strategies designed to improve the student's learning by improving the teacher's classroom behavior. (p. 27)

Goldhammer (1969) emphasizes the humanistic nature of the process:

Given close observation, detailed observational data, face to face interaction between the supervisor and teacher, and an intensity of focus that binds the two together in an intimate professional relationship, the meaning of "clinical" is pretty well filled out. (p. 54)

Krajewski (1982), in discussing the conceptual framework of clinical supervision, identifies the following eight steps as Cogan's "cycle of supervision":

1. Establishing the teacher-supervisor relationship.
2. Planning with the teacher.
3. Planning the strategy of observation.

4. Observing instruction.
5. Analyzing the teaching-learning process.
6. Planning the strategy of the conference.
7. The conference.
8. Renewed planning.

Acheson and Gall (1980) in Techniques in the Clinical Supervision of Teachers: Preservice and Inservice Applications, have expanded upon the ideas presented by Cogan and Goldhammer and developed a model which is "interactive rather than directive, democratic rather than authoritarian, teacher centered rather than supervisor centered" (p. 8).

A model for a teacher evaluation system based upon the precepts of clinical supervision and the legal ramifications of improper supervisory practice has been developed by Acheson (1982) who states that an effective teacher evaluation program should:

1. Contain a set of standards of performance for teachers.
2. Include job descriptions for teachers.
3. Require that evaluators follows a cycle of pre-observation conferences, multiple observations, and post-observation conferences before a final evaluation is prepared.
4. Require that evaluators have training and skills in conducting classroom observations.
5. Require that teachers and evaluators cooperatively set performance goals.

6. Provide evidence of a monitoring or management system for the evaluators themselves.
7. Require that a program of assistance be made available for teachers who need help with serious problems.

Iftody's (1983) summary of Board of Reference hearings and the recent court cases in the United States (e.g., those reviewed by Zirkel and Cluckman, 1984) tend to support Acheson's model and emphasize the need for clearly defined parameters and the provision for affording teachers "all rights to natural justice and due process" (Alberta Teachers' Association, 1980, p. 3).

Teacher Evaluation in Alberta

While there are large number of articles related to teacher evaluation in the Alberta literature (e.g., Duncan, 1980; Keeler, 1980; Reavis, 1980; Stockman, 1982; Tymko, 1980), the researcher uncovered only a few research studies: Holdaway and Reikie (1977), Reikie (1977), Alberta Education (1980), Berg (1983), and Townsend (1984).

Holdaway and Reikie (1977) and Reikie (1977) carried out a study into the "Practices and policies involved in the formal evaluation of teachers in Alberta." The study, drawing its data from questionnaires completed by superintendents, focussed on:

1. The categories of teachers evaluated and the frequency of their evaluation.

2. The personnel involved in formally evaluating teachers.
3. The formalized procedures and criteria used in formally evaluating teachers.
4. The uses made of the evaluations.
5. The opinions of the respondents regarding contemplated changes in the existing practices.

Some of the major findings of the study were:

1. Tenured teachers were rarely, and sometimes never evaluated; probationary teachers were usually evaluated only once a year.
2. Superintendents were often extensively involved in performing teacher evaluations; however, they would prefer greater involvement from other personnel, particularly principals.
3. Standard evaluation forms were possessed by many systems but were not often used.
4. Appeal procedures were absent in many jurisdictions but where such procedures were in place they commonly included discussing the matter with the superintendent or evaluator and/or requesting a reevaluation.
5. The most frequently emphasized criteria were process or pressage criteria.
6. Formal evaluations were used most frequently as a basis for recommending permanent certification and awarding permanent contracts. They were also commonly used as the basis for dismissals, and less frequently, as a basis for promotion.
7. Most superintendents were not contemplating any changes in their formal evaluation practices.
(adapted from Reikie, 1977, pp. iv, v)

The authors also noted that few systems had clearly structured evaluation policies and practices, that practices across the province were inconsistent, and that many jurisdictions had no teacher evaluation policy in place.

The Alberta Education (1980) study, entitled "Certificated Education Staff Evaluation," was essentially an abbreviated replication of the 1977 studies and its findings indicate that a number of changes occurred during the three intervening years. The most notable changes were:

1. Between 1977 and 1980 the use of formal evaluations for the purpose of improving teacher performance dramatically increased (18% in 1977 and 83% in 1980).
2. An increasing number of teachers, including first year teachers, experienced teachers new to the system, and tenured teachers, were being evaluated.
3. Beginning teachers were evaluated more frequently in 1980.
4. The number of jurisdictions reporting that they used a standardized form increased from 18% in 1977 to 52% in 1980. (adapted from Alberta Education, 1980, p. 17)

The Berg (1983) study was somewhat similar and questioned a sample of 30 Alberta superintendents on a number of items related to the policies and practices of their jurisdictions. The most notable findings were:

1. That an increased percentage of jurisdictions report that evaluation policies were in place (52% in 1980, 78% in 1983).
2. That about one half of respondents stated that their jurisdiction had written standards of performance, job descriptions, or programs of assistance.
3. Most jurisdictions used subjective criteria in their evaluation policies.
4. All of the superintendents surveyed reported that principals, or other school based staff were involved in formative evaluations. (adapted from Berg, 1983, p. 13)

The Townsend (1984) study was quite different from the preceding studies. It sought to "investigate, analyze, and document the process of implementation of a new policy of teacher supervision and evaluation in the five secondary schools of the Lethbridge School District No. 51" (p. i).

A survey of teachers' and supervisors' perceptions of usual and ideal supervisory behavior was conducted at the beginning and end of the study period and other data were collected through the administration of questionnaires and frequent observations of classrooms and conferences.

Analysis of the survey data showed that teachers and supervisors perceived a change in supervisory behavior towards what both groups considered as ideal supervisory behavior. Supervisors reported changed teacher behaviors especially in the areas of classroom management, planning, and increased attention to individual students.

Overall the results of the study showed high levels of acceptance and participation, high levels of satisfaction with the process, and a need for more training and more involvement of district office personnel in the future. (adapted from Townsend, 1984, pp. i-iii)

Conclusion

This review of the literature illustrated the diverse and sometimes contradictory nature of the research on teacher evaluation and traced the development of evaluation from its beginnings as an autocratic, inspectoral process to the rather more humane, multigoal, democratic interactive process exemplified by Acheson's "state of the art" model.

The dearth of research on teacher evaluation in Alberta illustrates the need for more information on current

practices, particularly with respect to the modern models based upon the clinical supervision process. The following chapters in this dissertation explore the demographics of teacher evaluation in Alberta, and examine current practices in evaluation with respect to improvement of instruction and due process criteria, namely, those processes common to the clinical supervision model.

CHAPTER III

DESIGN AND PROCEDURES

Introduction

To gather data on the state of formal evaluation in Alberta, this study involved a number of steps:

1. A three part questionnaire (Appendix A) was developed to collect data related to formal evaluation practices.
2. A study group consisting of Alberta school superintendents, other central office staff, and principals was selected.
3. The questionnaire was administered to the study group.
4. Minimum criteria in the areas of "due process" and "improvement of instruction" in teacher evaluation were established by submitting Section 3 of the questionnaire to experts for adjudication.
5. Teacher perceptions of appropriate evaluation strategies were assessed by administering Section 3 of the questionnaire to a sample of teachers.
6. Data received from these sources were processed as described later in this chapter.

Development of the Questionnaire

The initial draft of the questionnaire that provided the data base for the study was developed following a review of the literature and draws on the models used by Acheson (1980, 1981), Alberta Education (1980), Holdaway (1977), Reikie (1977), and Shinn (1976). These models were adapted on the basis of the researcher's experience in teacher evaluation in Alberta to form a compact questionnaire that focused specifically on the issues of this study.

The initial draft consisted of two sections. Section one drew heavily upon the Alberta Education (1980), Holdaway (1977), and Reikie (1977) models and was designed to collect demographic data and information on the intended purpose of the evaluation. Section two was based upon the models developed by Acheson (1980, 1981) and Shinn (1976).

The Acheson/Shinn model used 32 descriptive statements of classroom supervisory activities that request responses on a five point Likert scale ranging from "never" to "always." The items from this model were rephrased to a "first person" format; a number of questions were amalgamated and a few items, relating mainly to due process considerations, were added. The 27 items thus generated were formatted to elicit a yes/no response.

Seven people evaluated this draft: three experienced supervisors, a teacher, a professor of education, a

researcher in teacher evaluation, and a lawyer whose expertise lies in the educational domain. These people were asked to judge the clarity of the descriptive statements and the appropriateness of the items for assessing teacher evaluation practices.

As a result of the input received, the initial draft was revised. The first section was expanded to include data on the initiating factors in the evaluation and its outcome, and the second section was increased to 37 items, of which 26 were adaptations of the Acheson/Shinn items.

The instrument was then piloted with ten principals from the Lakeland School District # 5460 in Alberta. The principals were asked to respond to the questionnaire and to critique it. On the basis of their responses a few minor wording modifications were made and the questionnaire was reformatted into a three section instrument. Section one collected demographic data about the responding evaluator. Section two addressed the "last formal teacher evaluation carried out" and collected data related to the initiating factors, purposes, and outcomes of the evaluation. Section three was the modified Acheson/Shinn instrument designed to acquire data on the supervisory activities used in "the last formal teacher evaluation you carried out."

The revised instrument was then piloted with nine superintendents from North Eastern Alberta. Superintendents were asked to respond to the questionnaire and to critique

it. Based upon their input, no further changes were made to the instrument.

Appendix A contains the final draft of the questionnaire.

Identification of the Study Group

The Holdaway (1977) study showed that the personnel primarily involved in the formal evaluation of teachers are the superintendent, other central office staff, and the school principal; that in less than 10% of school jurisdictions are vice-principals "always or frequently" involved and that other categories of evaluator (teachers, Alberta Education consultants, etc.) were rarely, if ever, involved. A study by Berg (1983) indicates that in 1983, vice-principals were involved in 4% of evaluations requiring written reports (Berg, 1983, p. 8).

The populations surveyed in this study included school principals in public and separate schools in Alberta, the superintendents of Alberta school jurisdictions, and other central office staff who were members of the Conference of Alberta School Superintendents (C.A.S.S.) as of December 1983. Data on principals and superintendents were obtained from Alberta Education and data on other central office personnel were obtained from the Conference of Alberta School Superintendents.

Sampling

Superintendents

Alberta Education lists 147 school jurisdictions in the province. Of these, two lie in the City of Lloydminster, a community straddling the Alberta/Saskatchewan border. Lloydminster school jurisdictions are governed by the Saskatchewan Department of Education and were therefore excluded from the study. The remaining 145 Alberta school jurisdictions are served by 106 superintendents. Questionnaires were sent to all 106 Alberta superintendents.

Other Central Office Staff

Central office staff in Alberta school jurisdictions can be categorized into two groups:

1. Those staff members, who by virtue of their job description or contract, are full members of the Alberta Teachers' Association (A.T.A.) and are thus governed by the rules of the A.T.A.
2. Those staff members who, by virtue of their job description or contract are specifically excluded from full membership in the Alberta Teachers' Association (although they may be associate members). These staff members are eligible for membership in the Conference of Alberta School

Superintendents, and, "a very large percentage of those eligible are members" (C.A.S.S., 1984, p. 1).

Since the allegiances of the two groups tend to be different, and since the only centralized listing of central office staff other than the superintendent is the C.A.S.S. membership list, the researcher selected as the "other central office staff" population, those staff members whose names appeared on the December 1983 C.A.S.S. membership list.

120 "other central office" staff members were identified from the list; however, telephone contacts with non-respondents indicated that between December 1983 and May 1984, seven of that number had left the position, leaving a total population of 113. Questionnaires were sent to all 113 "other central office" staff.

Principals

A pilot of the questionnaire with ten principals in Northern Alberta yielded only a 60% return rate with no follow-up. It was therefore surmised that an attempt to survey the entire population would yield a relatively low return rate or require a prohibitively expensive series of follow-up procedures.

Since a low return rate would not permit generalization to the whole population, a random sampling procedure was used. This made mail and telephone follow-up procedures

economically viable, resulted in a higher return rate and permitted generalization of the results to the population within the limits of sampling error.

A random sample of principals was drawn to provide a sufficiently large number of cases to allow for meaningful statistical analysis. The sample, consisting of 25% of the population, was provided by the Computer Services Branch of Alberta Education and included the names of 347 principals selected randomly by computer. Questionnaires were sent to all 347 principals.

Distribution of the Questionnaires

During the last week of April 1984, a package containing a questionnaire, a letter of introduction, and a self-addressed, reply-paid envelope was mailed to each of the administrators identified in the sample.

During the third week of May, a similar package containing a questionnaire, a reminder letter and a self-addressed, reply-paid envelope was mailed to non-respondents.

Three weeks later, non-respondents were mailed a personalized reminder letter, together with a questionnaire and a self-addressed, reply-paid envelope.

During the last week of June, the remaining non-respondents were telephoned at their place of work and, where the person was available, s/he was asked to respond to

the survey. Where the person was not available, a message was left requesting a response.

All participants were advised that individual responses would remain confidential and that the results of the study would be disseminated in the Fall.

Establishment of Minimum Criteria for Satisfactory Evaluation

One of the purposes of this study was "To analyze the completeness of teacher evaluation procedures used by evaluators in Alberta with respect to: (1) the improvement of instruction, and (b) due process requirements." To do this an instrument (hereafter called The Modified Acheson/Shinn Instrument) was developed and administered to five experts in the area of due process, to nine experts in the area of the improvement of instruction, and to 51 teachers who provided the teacher perspective on the instrument.

Development of the Instrument

Section three of the final draft of the questionnaire (Appendix A) was isolated and modified by replacing the yes/no response section with a four-point scale containing the descriptors: Essential (high priority), Desirable (moderate priority), Acceptable (low priority), and Unacceptable. The Modified Acheson/Shinn Instrument was

mailed to those individuals identified as experts.

Identification of Experts

The Deans of Education of Alberta's Universities, Alberta Education, the Conference of Alberta School Superintendents, the Alberta School Trustees Association, and the Alberta Teachers' Association were asked to nominate "acknowledged experts" in the field of teacher evaluation. Responses were received from each of these agencies and experts were identified in the areas of "due process" and "improvement of instruction."

Due Process

The following people were identified as experts in the area of "due process in teacher evaluation":

Judy Anderson, B.A., LL.B., LL.M., Lawyer for the Alberta School Trustees Association.

Richard McNally, LL.B., Lawyer for the Alberta School Trustees Association.

Mary Jo Williams, Ph.D., Staff Officer for the Alberta Teachers' Association.

C. P. Clarke, LL.B., Lawyer for the Firm Field and Field, Barristers and Solicitors and legal counsel for the Alberta Teachers' Association.

M.B. Bielby, LL.B., Lawyer for the Firm Field and Field, Barristers and Solicitors and legal counsel for the

Alberta Teachers' Association.

During the first week of May 1984, a package containing a personal letter, the Modified Acheson/Shinn Instrument, and a reply-paid, self-addressed envelope was mailed to each of the persons identified as experts. The experts were asked to review the instrument and to rate the items in terms of their importance in assuring "due process" in teacher evaluation. Responses were received from all of the experts listed above and no follow-up procedures were required.

Improvement of Instruction

The following people were identified as experts in the domain of "teacher evaluation for the improvement of instruction":

Dr. David Townsend, Researcher, Lethbridge School District #51.

Dr. Alex Proudfoot, Department of Teacher Education and Supervision, University of Calgary.

Dr. Eugene Ratsoy, Department of Educational Administration, University of Alberta.

Myrna L. Greene, Coordinator, Education Research Centre, University of Lethbridge.

Dr. Laurie Mireau, Instructional Processes Consultant, Edmonton Public School Board.

Dr. Leroy Sloan, Assistant Superintendent, Educational Services, County of Parkland.

Dr. W. Unruh, Professor, Department of Teacher Education and Supervision, University of Calgary.

Dr. A. Boberg, Assistant Professor, Department of Educational Policy and Administration Studies, University of Calgary.

Dr. R. Heyman, Professor, Department of Educational Policy and Administration Studies, University of Calgary.

During the first week of May 1984, a package containing a personal letter, The Modified Acheson/Shinn Instrument, and a reply-paid, self-addressed envelope was mailed to each of the persons identified as experts. The experts were asked to review the instrument and to rate the items in terms of their importance to "evaluation for the improvement of instruction." Responses were received from all of the experts listed above.

Teachers' Perceptions of Evaluation Procedures

At the request of the Planning Services Branch of Alberta Education, a small, random sample of teachers was surveyed to assess their reaction to the questions asked in The Modified Acheson/Shinn Instrument. The sample was provided by the Computer Services Branch of Alberta Education and included the names of 51 teachers selected randomly from all teachers in school jurisdictions in Alberta.

During the third week of May 1984, a package containing The Modified Acheson/Shinn Instrument, a covering letter and a reply-paid, self-addressed envelope was mailed to each teacher identified in the sample.

A follow-up package was mailed to non-respondents three weeks later, and during the last week of June, the remaining non-respondents were telephoned at their place of work and, where the person was available, s/he was asked to respond to the survey. Where the person was not available, a message was left requesting a response.

Data Processing

Data from the questionnaires were entered onto keypunch cards and verified. The keypunch cards were processed in the University of Alberta computer and the data transferred to disk. Using the SPSSX Sprint package, frequency distributions and means were generated for all variables and the initial printout was examined for apparent anomalies. The single anomaly discovered was compared with the original data and corrected.

The expert ratings in the areas of due process and improvement of instruction, and the teacher ratings on the Acheson/Shinn Instrument were summed and averaged. Using the criterion that the subset of items with a mean score of 1.75 or less constituted the minimum criteria for satisfactory evaluation, three subsets of the original 37

items were generated:

1. The due process subset consisting of items 2, 10, 11, 12, 20, 21, 22, 23, 24, 25, 26, 31, 32, 33, 34, 35, and 36.
2. The improvement of instruction subset consisting of items 2, 3, 4, 5, 10, 11, 12, 13, 20, 21, 22, and items 24 through 37 inclusive.
3. The teacher preference subset consisting of items 3, 4, 5, 20, 25, 26, 27, 28, and items 30 through 37 inclusive.

Data relating to these subsets were entered into the computer.

Cross tabulation tables were generated to compare the responses of superintendents, other central office staff, and principals on the several of the items in sections 1 and 2 of the questionnaire and of each of the items in section 3.

Three by three analysis of variance was carried out to test for significant differences in the scores on Section 3 of the questionnaire by category of evaluator (superintendent, other central office, or principal) and category of teacher evaluated (first year, experienced but new to the system, tenured). Two way analysis of variance was carried out to test for significant differences in the scores on Section 3 of the questionnaire with respect to the responses on Section 2, questions 6 through 10. Two way analysis of variance was used to test the significance of

the response to individual items on Section 3 of the questionnaire with respect to the sum of the other items in the same section.

The Pearson Product Moment correlation was used to test the significance of the relationship between the scores on Section 3 and demographic variables.

CHAPTER IV

PRESENTATION AND ANALYSIS OF DATA

Introduction

This chapter presents the findings of the study as derived from the instruments used to gather the data.

The results are presented in six sections:

1. Demographic factors relating to all respondents.
2. The demographics, initiating factors, intended purposes, and outcomes of the "last formal teacher evaluation carried out" by the respondents.
3. The evaluation strategies used in the "last formal teacher evaluation carried out" by the respondents.
4. The establishment of minimum criteria for satisfactory evaluation.
5. The relationship between actual practice and the minimum criteria for satisfactory evaluation.
6. The relationships between demographic factors and the score on the Modified Acheson/Shinn Instrument.

Demographic Data

Response Rate

Five hundred and sixty six questionnaires were sent to superintendents, other central office staff, and principals,

and a total of 484 usable responses were received, resulting in an 85.5% return rate for the study group.

Of the 106 superintendents surveyed, 99 (93.4%) returned usable responses, two (1.9%) wrote letters indicating their reluctance to participate in the research, and one (0.9%) returned a blank questionnaire.

Other central office staff returned 97 (85.8%) of the 116 questionnaires sent out and one (0.9%) letter was received declining to participate in the study.

Principals responded by returning 288 (83.3%) of the 347 questionnaires mailed out. One (0.3%) letter was received declining participation.

Demographic Factors

Table 1 illustrates the extent of the respondents' experience in teacher evaluation. Superintendents ranged in experience from zero to 31 years, other central office staff from zero to 37 years, and principals from zero to 30 years. As might be expected, superintendents have, on average, more experience than other central office staff, who in turn, are more experienced than principals. Of note is the relatively high proportion (19.2%) of superintendents with twenty or more years experience. The possible ramifications of this are discussed later in the chapter.

Table 2 shows the number of university credit courses in teacher evaluation completed by the respondents. A

TABLE 1. Years of Experience as a Teacher Evaluator

Years of Experience	Superintendents N = 99	Other Central Office Staff N = 97	Principals N = 288
0	2.0%	3.1%	8.0%
1 - 5	12.1%	13.6%	25.7%
6 - 10	19.2%	38.6%	31.3%
11 - 15	35.4%	29.2%	17.0%
16 - 20	12.1%	8.3%	11.1%
Over 20	19.2%	7.2%	6.9%
Mean	13.8 years	11.4 years	9.3 years

TABLE 2. Number of University Credit Courses in the
Evaluation of Teachers Completed
by the Respondents

Number of Courses*	Superintendents N = 99	Other Central Office Staff N = 97	Principals N = 288
0	28.3%	28.9%	46.5%
1	18.2%	15.5%	27.1%
2	23.2%	24.7%	14.6%
3	12.1%	15.5%	7.6%
4	11.1%	12.4%	2.4%
5 or more	7.1%	3.0%	1.7%
Mean number of courses	1.86	1.76	1.00

*A University credit course means a six credit course from an Alberta university or six semester hours or nine term hours of coursework from U.S. universities.

course was defined as a full course from an Alberta university or six semester hours or nine term hours of coursework from a United States university. Superintendents and other central office staff reported a range of zero to six courses, and principals reported a range from zero to nine courses. Again, as might be expected, superintendents had, on average, more university training than other central office staff, who had more training than principals.

Over one quarter of the superintendents and other central office staff, and almost half of the principals responding to the survey indicate that they had no university training in the evaluation of teachers.

Table 3 presents the data on the time spent by respondents on inservice training in teacher evaluation during the last five years.

Responses from superintendents showed a range of in service time from zero to 1000 hours, with 98 of the 99 responses falling in the range from zero to 120 hours. A telephone conversation with the superintendent with the 1000 hour response revealed that teacher evaluation had been his particular area of study for the past few years and that the 1000 hours (. . . "a conservative estimate") included reading and research, and the giving and receiving of in service training. Because this response comprised over one third of the total time spent by all superintendents on in service training in teacher evaluation, and was so atypical,

TABLE 3. Hours of In Service Training in Teacher
Evaluation Undertaken by Members of the Study
Group During the Past Five Years

Hours of In Service Training	Superintendents N = 98	Other Central Office Staff N = 97	Principals N = 288
0	26.5%	26.8%	26.7%
1 - 6	17.3%	9.3%	20.8%
7 - 12	18.4%	14.4%	18.8%
13 - 18	3.1%	5.2%	6.3%
19 - 24	5.1%	18.6%	10.4%
25 - 30	13.3%	5.2%	6.9%
31 - 36	1.0%	2.1%	0.3%
37 - 42	3.1%	1.0%	1.4%
43 - 48	3.1%	1.0%	1.0%
48 - 54	2.0%	3.1%	2.8%
55 or more	7.1%	13.3%	4.5%
Mean number of hours of In Service	18.5	23.4	14.9

Table 3 does not include the data from this respondent.

Other central office staff reported a range of in service training time from zero to 120 hours and principals reported a range of zero to 200 hours.

The median for superintendents was 9.8 hours, for other central office staff, 10.5 hours, and for principals, 7.1 hours. More than a quarter of the respondents in each group reported that they had undertaken no in service training during the last five years.

Data presented later in the chapter will show that other central office staff evaluate more teachers (on a per capita basis) than do superintendents, who in turn evaluate more teachers than do principals. This pattern is reflected in the time spent on in service training.

The study group perception of the existence of a district teacher evaluation policy is reported in Table 4.

Previous studies in Alberta, which reported the data on the presence of policies by jurisdiction indicated that in 1980, 52% of the jurisdictions had a teacher evaluation policy in place (Alberta Education, 1980), and in 1983 a policy was in place in 78% of the jurisdictions (Berg, 1983). By comparison, 80.8% of respondents in this study indicated the presence of a policy in their jurisdiction.

In light of the recent Alberta Education (1984) regulation requiring that school boards have a written policy in place, it is of interest that 14.5% of respondents

TABLE 4. Study Group Perception of the Existence
of a District Teacher Evaluation Policy

Policy in Place	Percentage of Respondents N = 484
Yes	80.8%
No	14.5%
Unsure	3.7%
No Response	1.0%

indicated that their jurisdiction had no written policy on teacher evaluation.

Table 5 reports the study group's assessment of the adequacy of the time they have available for teacher evaluation. The data show that very few of the respondents considered the time available totally adequate and more than 50% of the 473 respondents considered that the time available was inadequate or totally inadequate.

More other central office staff indicated that the evaluation time available to them was adequate (30.5%) than superintendents (14.6%) or principals (20.6%). This may well be because they evaluate more teachers (on a per capita basis) than superintendents or principals, and teacher evaluation is generally an integral part of the job description.

When asked to rate the priority of teacher evaluation in relation to all of their duties, over half of the other central office staff and the principals, and almost three quarters of the superintendents, indicated (Table 6) that teacher evaluation was a high or very high priority item. Of respondents who carried out teacher evaluations during the year, 89% rated teacher evaluation as a high or very high priority.

The general perception among a majority of respondents is that teacher evaluation is a high priority item, but that they have a less than an adequate amount of time to carry out this function.

TABLE 5. Study Group Assessment of the Adequacy
of the Time Available for Teacher Evaluation

Time Available	Superintendents N = 96	Other Central Office Staff N = 92	Principals N = 285
Totally Adequate 1	3.1%	9.8%	6.3%
2	11.5%	20.7%	14.4%
3	29.2%	25.0%	25.6%
4	38.5%	28.3%	35.1%
Totally Inadequate 5	17.7%	16.3%	18.6%

TABLE 6. Study Group Perception of the Priority
of Teacher Evaluation

Priority	Superintendents N = 96	Other Central Office Staff N = 92	Principals N = 285
Very High 1	25.8%	16.1%	15.8%
2	47.4%	40.9%	37.2%
3	15.5%	23.7%	28.8%
4	5.2%	8.6%	10.5%
Very Low 5	6.2%	10.8%	7.7%

Evaluations Performed

During the study period, respondents reported that a total of 4,924 teachers were evaluated. Of these, 1454 (29.5%) were evaluated by superintendents, 1631 (33.1%) by other central office staff, and 1839 (37.3%) by principals.

Not all respondents were involved in teacher evaluations during the study period but 71.7% of superintendents, 67% of other central office staff and 73.3% of principals reported that they had evaluated one or more teachers. Of the respondents who did evaluate teachers, superintendents averaged 20.8 teachers, other central office staff, 25.1 teachers, and principals, 8.7 teachers.

The Last Formal Teacher Evaluation Carried Out

Demographic Data

Table 7 illustrates the patterns of formal teacher evaluation during the study period and during the last formal teacher evaluation carried out by respondents. (N.B. A formal evaluation may consist of a series of conferences and observations leading to a single written report.) The patterns are somewhat similar but respondents show a higher percentage of evaluations of new teachers in the category of "last formal evaluation." Since the questionnaires were administered in May, the last month for making decisions of tenure versus termination on new teachers, it is probable

TABLE 7. Patterns of Teacher Evaluation
During the Study Period

	First Year Teachers	Experienced Teachers New to School/System	Tenured Teachers
Teachers Evaluated During Survey Period N = 4924	21.9%	17.3%	60.8%
Teachers Evaluated During "Last Formal Evaluation" N = 342	30.1%	18.1%	51.8%

that respondents were placing a higher priority on the evaluation of first year teachers during this period.

Table 8 shows the distribution of classroom observations among grade levels for the last formal evaluation. A total 347 teachers were formally evaluated and many of these were observed on several occasions, and at different grade levels; thus, the number of reported observations exceeds 347.

The largest single group of teachers evaluated (31.4%) were those teaching at the junior high school level.

Table 9 indicates the distribution of observations among subject categories for the last formal evaluation. A total 347 teachers were formally evaluated and many of these were observed on several occasions, and in different subject areas; thus, the number of reported observations exceeds 347.

Almost one third of the observations carried out were in language arts classes, and just under a quarter were in math. Social studies and all the sciences accounted for another quarter of the observations, and the remaining 20% were categorized as "other."

Physical education, French, art, and music predominated among the responses in the "other" category, but the study group reported a wide range of subjects observed including: industrial education, religion, remedial education, drama, family life education, home economics, business education,

TABLE 8. Distribution of Observations
Among Grade Levels

Grade Level	Percentage of Reported Observations N = 477
ECS	2.5%
1 - 3	24.1%
4 - 6	23.1%
7 - 9	31.4%
10 - 12	14.7%
Spec. Ed.	4.2%
Total	100.0%

TABLE 9. Distribution of Observations
Among Subject Categories

Subject Observed	Percentage of Reported Observations N = 606
Language Arts	31.4%
Math	22.4%
Social	16.7%
Sciences	9.4%
Other	20.1%
Total	100.0%

vocational education, living skills, guidance, crafts, health, beauty culture, law, computer education, and Ukrainian.

Table 10 reports the number of separate classroom visits made by respondents during the last formal teacher evaluation. Superintendents reported a range of one to seven visits with a mean of 2.2 visits, other central office staff ranged from one to nine visits and averaged 2.7 visits, and principals ranged from one to nine visits and averaged 3.4 visits. Over 80% of the respondents indicated that they had made two or more visits, and over half made three or more visits during the last formal teacher evaluation.

The time spent in actual classroom observation during the last formal teacher evaluation is shown on Table 11. The total observation time reported by the respondents ranged from ten minutes to fifteen hours. The mean number of minutes spent in observation was 163.9; the median was 116.8 minutes.

Table 12 reports the study group perception of the degree of adherence to school board policy during the last formal teacher evaluation. Of the 347 members of the study group who evaluated teachers, 11.2% made no response to this item. This may very well have been because they perceived that their district had no policy. Of those who responded, superintendents showed the greatest rate (44.1%) and principals the least rate (29.0%) of following policy strictly to the letter.

TABLE 10. Number of Classroom Visits Made During
the Last Formal Teacher Evaluation

Number of Visits	Superintendents N = 68	Other Central Office Staff N = 62	Principals N = 197
1	26.5%	14.5%	10.7%
2	44.1%	38.7%	22.8%
3	17.6%	27.4%	26.4%
4	7.4%	9.7%	18.3%
5	0%	4.8%	10.2%
6 or more	4.4%	4.8%	11.6%
Mean	2.2 visits	2.7 visits	3.4 visits

TABLE 11. Number of Minutes Spent in Classroom
Observation During the Last Formal
Teacher Evaluation

Minutes Spent in Observation	Percentage of Respondents N = 347
0 - 60	17.3%
61 - 120	35.4%
120 - 180	19.6%
180 - 240	13.8%
240 - 300	3.7%
Over 300	7.5%
No Response	2.7%

Mean number of minutes per formal evaluation: 163.9

TABLE 12. Study Group Perception of Their Degree
of Adherence to School Board Policy During the
Last Formal Teacher Evaluation

Degree of Adherence to Board Policy	Superintendents N = 59	Other Central Office Staff N = 63	Principals N = 186
Strictly to the letter 1	44.1%	41.3%	29.0%
2	44.1%	52.4%	49.5%
3	6.8%	4.7%	16.1%
4	5.0%	1.6%	3.8%
Not at all 5	0%	0%	1.6%

Table 13 reports the respondents' rating of the performance of the last teacher formally evaluated. Although almost two thirds of all respondents rated the teachers in categories one and two, principals rated more teachers in these categories than did other central office staff or superintendents. Superintendents and other central office staff reported a much higher proportion of teachers whose performance was rated as not satisfactory.

Since it is commonly the task of the superintendent or other central office staff (rather than the principal) to make the final decision on the tenure or contract status of a teacher, it seems reasonable that they would place greater emphasis on the formal evaluation of unsatisfactory teachers than would principals. One might also speculate that, in the interests of maintaining harmony and a collegial relationship with staff, principals might avoid the onerous, and often contentious, task of formally evaluating those teachers whose performance they perceived as unsatisfactory.

Table 14 shows the primary intended purposes of the last formal teacher evaluation carried out by the respondents. Some respondents indicated more than one primary purpose for the evaluation so the number of responses (424) exceeds the number of formal evaluations reported (347). Other central office staff and principals most frequently cited improving the performance of the teacher as the primary purpose, whereas superintendents

TABLE 13. Respondents' Rating of the Performance of the Last Teacher Formally Evaluated

Rating	Superintendents N = 69	Other Central Office Staff N = 65	Principals N = 204
Excellent 1	18.8%	13.8%	32.8%
2	33.3%	52.3%	38.7%
3	23.2%	20.0%	22.1%
4	13.0%	4.6%	5.9%
Not Satisfactory 5	11.5%	9.2%	0.5%

TABLE 14. Primary Intended Purpose of the Last Formal Evaluation

Primary Intended Purpose	Percentage of Responses		
	S N = (88)	O (77)	P * (259)
Improving performance of teacher	19.3%	31.2%	29.3%
Awarding a permanent contract	26.1%	28.6%	12.7%
Basis for retention in position	19.3%	13.0%	13.9%
Recommending permanent certification	14.8%	7.8%	10.4%
Determining inservice needs	5.7%	5.2%	7.7%
Basis for dismissal	5.7%	7.8%	2.3%
Basis for transfer	1.1%	0%	3.5%
Recording the performance of a resigning/retiring teacher	1.1%	1.3%	1.9%
Basis for promotion	1.1%	1.3%	1.2%
Other	5.7%	5.2%	17.0%

* S = Superintendents
 O = Other Central Office Staff
 P = Principals

ranked this function second to the awarding of a permanent contract. The dismissal of teachers was a primary purpose for the last evaluation for 4.1% of all respondents; however, it was more often the primary purpose with other central office staff (7.8%) than with superintendents (5.7%) or principals (2.3%).

In the "other" category, the majority of responses indicated that the primary purpose of the evaluation was to comply with a board policy; however, a few respondents indicated that their primary purpose was to provide documentation for the Edwin Parr Teacher of the Year Award, an award presented annually by the Alberta School Trustees Association.

Table 15 reports the factors involved in initiating the evaluation. Some respondents indicated more than one initiating factor for the evaluation so the total number of responses (386) exceeds the number of formal evaluations reported (347).

Almost two thirds of the responses indicated that the evaluation was a routine evaluation as required by school board policy. The responses were similar across all three evaluator categories although superintendents showed a slightly greater emphasis on the need for documentation. Only 11.5% of the respondents indicated that the evaluation was initiated in response to evaluator concern or parent complaints.

TABLE 15. Primary Condition Involved in Initiating
the Last Formal Teacher Evaluation

Initiating Factor	Percentage of Responses		
	S N = (82)	O (73)	P * (231)
District policy: Routine evaluation	57.3%	60.3%	66.7%
Need for documentation	17.1%	13.7%	11.7%
Teacher request	9.8%	9.6%	5.6%
Concerns after informal observations	7.3%	5.5%	6.5%
Parental complaint	3.7%	6.8%	5.2%
Other	4.9%	4.1%	4.3%

* S = Superintendents
O = Other Central Office Staff
P = Principals

"Other" initiating factors included variations on the need for documentation, and the Edwin Parr Award.

Table 16 reports the outcome of the last formal teacher evaluation. Some respondents indicated more than one outcome for the evaluation so the total number of responses (432) exceed the number of formal evaluations reported (347). The most frequently reported outcome by all evaluator categories was that the teacher would continue in his or her present position. The awarding of a permanent contract, recommendation for permanent certification, and the development of an in service training plan were other commonly cited responses. Only three teachers (0.7% of all responses) challenged the evaluation report.

Teacher dismissal was reported as the outcome in 4.8% of all responses, but as might be expected, evaluations conducted by superintendents resulted in a higher dismissal rate (9.0%) than those conducted by other central office staff (4.6%) or principals (3.5%). Responses in the "other" category included the filing of reports in the teacher's personal file and recommendation for the Edwin Parr Award.

In summary, the majority of the last formal teacher evaluations carried out by the study group were initiated as routine evaluations according to school board policy; their primary purposes were: improving the performance of the teacher, awarding a permanent contract, providing a basis for retention in position, and recommending for

TABLE 16. Outcome of the Last Formal Teacher Evaluation

Outcome of the Evaluation The teacher was/will:	Percentage of Responses		
	S N = (87)	O (87)	P * (258)
continue in present position	35.6%	36.7%	45.7%
receive a permanent contract	20.7%	20.7%	11.2%
be recommended for permanent certification	14.9%	8.0%	12.4%
assisted with an inservice plan	4.6%	14.9%	10.1%
dismissed	9.0%	4.6%	3.5%
seen by another evaluator	4.6%	4.6%	4.7%
promoted	0%	3.4%	1.6%
challenge the evaluation report	0%	1.1%	0.8%
Other	10.3%	5.7%	10.1%

* S = Superintendents
 O = Other Central Office Staff
 P = Principals

permanent certification. As a result of the evaluation, most teachers were retained in their present position, received a permanent contract or were recommended for permanent certification.

Establishment of Minimum Criteria for Satisfactory Evaluation

Due Process Criteria

Copies of the modified Acheson/Shinn instrument were sent to the five people identified as experts in the area of due process in teacher evaluation. The experts were asked to rate each item as (1) Essential, (2) Desirable, (3) Acceptable, or (4) Not Acceptable.

Three of the experts returned usable responses, another replied with a letter declining to respond, and the other addressed the items in more general terms.

The instrument was scored with items rated as essential receiving one point; desirable, two points; acceptable, three points; and not acceptable, four points. Table 17 shows the ranked mean scores of the ratings.

Items receiving a mean score between 1.00 and 1.75 were rated as essential to assuring due process in formal teacher evaluation. Those items were:

Item 2. Standards of performance had been developed for the teacher (score 1.66).

Item 10. I recorded data on the teacher's questions for later analysis (score 1.66).

TABLE 17. Experts' Ratings of Items on the Modified Acheson/Shinn Instrument

Item #	Descriptor	I	P	T*
25	Met with teacher after observation	1.00	1.00	1.16
20	Observed for at least 30 minutes	1.00	1.00	1.43
35	Teacher received a copy of report	1.13	1.33	1.10
32	Developed recommendations	1.50	1.00	1.39
34	Developed a plan of assistance	1.50	1.00	1.47
36	Teacher could respond in writing	1.13	1.66	1.32
33	Developed recommendations with teacher	1.25	1.66	1.23
37	Appeal procedure available	1.00	2.00	1.23
26	Solicited teacher analysis of data	1.50	1.66	1.29
31	Recommended resources	1.50	1.66	1.45
30	Gave praise and encouragement	1.25	2.33	1.32
27	Encouraged teacher inferences & opinions	1.38	2.33	1.19
28	Encouraged consideration of alternatives	1.29	2.00	1.71
22	Compared with Alberta Program of Studies	1.75	1.33	2.03
24	Examined student work	1.63	1.66	1.87
2	Standards of performance developed	1.57	1.66	2.00
3	Met prior to observation	1.75	2.00	1.52
12	Recorded data on on-task behavior	1.75	1.66	2.00
10	Recorded data on teacher questions	1.75	1.66	2.03
21	Examined teacher's planbook	1.63	1.66	2.19
5	Found teacher concerns	1.38	2.66	1.52
1	Had written job description	1.80	2.00	1.76
11	Recorded data on student responses	1.75	1.66	2.30
4	Found teacher expectations of students	1.75	2.50	1.48
29	Listened more than I talked	1.43	2.66	1.87
23	Examined record of student achievement	2.13	1.66	2.19
13	Recorded data on patterns of response	1.75	2.00	2.38
7	Teacher chose observational strategies	1.88	3.00	1.77
8	Recorded impressions about classroom	2.25	2.33	2.20
19	Recorded student/teacher interactions	1.88	2.66	2.33
16	Recorded data on student movement	2.50	2.33	2.53
9	Made notes of classroom dialogue	2.50	2.33	2.53
15	Recorded data on teacher movement	2.35	2.66	2.50
6	Suggested observational techniques	2.17	3.00	2.00
18	Recorded data on specific student	3.00	2.66	2.93
17	Made video recordings	2.69	3.33	3.14
14	Made audio recordings	2.88	3.33	2.97

*I = Mean score of ratings by experts in improvement of instruction; P = Mean score of ratings by experts in due process; T = Mean score of teacher ratings

Items rated as "essential" have a mean score between 1.00 and 1.75

Item 11. I recorded data on students' responses to the teacher's questions (score 1.66).

Item 12. I recorded data on student on task behavior (score 1.66).

Item 20. I remained in the classroom for at least 30 minutes when I visited (score 1.00).

Item 21. I examined the teacher's planbook (score 1.66).

Item 22. I specifically checked that the program was in accord with the Alberta Program of Studies (score 1.33).

Item 23. I examined the record of student achievement (score 1.66).

Item 24. I examined student work (score 1.66).

Item 25. I met with the teacher after the observations (score 1.00).

Item 26. I solicited the teacher's analysis of the data (score 1.66).

Item 31. I recommended resources such as books and training programs which dealt with areas in which the teacher wished to improve (score 1.66).

Item 32. I developed recommendations to assist the teacher improve instruction (score 1.00).

Item 33. I developed recommendations in cooperation with the teacher (score 1.66).

Item 34. I developed a plan of assistance for the teacher as an outcome of the evaluation (score 1.00).

Item 35. I gave the teacher a copy of the evaluation report (score 1.33).

Item 36. The teacher was given the opportunity to respond in writing to the report (score 1.66).

In essence, the items related to due process suggest that:

1. Standards of performance must be developed for the teacher.
2. A variety of objective data must be collected.
3. A post conference must be held with the teacher to discuss the data and develop recommendations for improvement.
4. A plan of assistance must be developed for the teacher.
5. The teacher must be given a copy of the evaluation report and have the opportunity to respond in writing.

Improvement of Instruction Criteria

Copies of the modified Acheson/Shinn instrument were sent to the nine people identified as experts in the area of the improvement of instruction in formal teacher evaluation. The experts were asked to rate each item as (1) Essential, (2) Desirable, (3) Acceptable, or (4) Not Acceptable.

All of the experts returned usable responses; however, one reply was received too late to be included in the data processing.

The instrument was scored with items rated as essential receiving one point; desirable, two points; acceptable, three points; and not acceptable, four points. Table 17 shows the ranked mean scores of the ratings.

Items receiving a mean score between 1.00 and 1.75 were

rated as essential to the improvement of instruction in formal teacher evaluation. Those items were:

Item 2. Standards of performance had been developed for the teacher (score 1.57).

Item 3. I met with the teacher prior to the observation (score 1.75).

Item 4. I found out what the teacher expected the students to be doing during the visit (score 1.75).

Item 5. I found out what concerns or problems the teacher had (score 1.38).

Item 10. I recorded data on the teacher's questions for later analysis (score 1.75).

Item 11. I recorded data on students' responses to the teacher's questions (score 1.75).

Item 12. I recorded data on student on task behavior (score 1.75).

Item 20. I remained in the classroom for at least 30 minutes when I visited (score 1.00).

Item 21. I examined the teacher's planbook (score 1.63).

Item 22. I specifically checked that the program was in accord with the Alberta Program of Studies (score 1.75).

Item 24. I examined student work (score 1.63).

Item 25. I met with the teacher after the observations (score 1.00).

Item 26. I solicited the teacher's analysis of the data (score 1.50).

Item 27. I encouraged the teacher to make inferences and to express feelings and opinions about the observational data (score 1.38).

Item 28. I encouraged the teacher to consider alternative teaching techniques and explanations of classroom events (score 1.29).

Item 29. I listened more than I talked during the post observation conference (score 1.43).

Item 30. I gave praise and encouragement for specific growth in the teacher's teaching skills (score 1.25).

Item 31. I recommended resources such as books and training programs which dealt with areas in which the teacher wished to improve (score 1.50).

Item 32. I developed recommendations to assist the teacher improve instruction (score 1.50).

Item 33. I developed recommendations in cooperation with the teacher (score 1.25).

Item 34. I developed a plan of assistance for the teacher as an outcome of the evaluation (score 1.50).

Item 35. I gave the teacher a copy of the evaluation (score 1.13).

Item 36. The teacher was given the opportunity to respond in writing to the report (score 1.13).

Item 37. The teacher had recourse to a formal appeal procedure if he/she challenged the report (score 1.00).

The 25 items identified as essential to the improvement of instruction generally overlap the items required to meet due process requirements, the major difference being the rather more teacher-centered nature of the improvement of instruction subset. In essence, to meet the minimum criteria for the improvement of instruction, the minimum criteria to assure due process must be met (with the exception of Item 23, the examination of the record of student achievement) and:

1. A preconference must be held to discover what the teacher expected the students to be doing, and to discern what problems or concerns the teacher had.

2. During the post conference, greater teacher input must be sought and appropriate praise and encouragement given.
3. A formal appeal procedure should be available if the teacher challenged the report.

Teacher Perceptions

Copies of the modified Acheson/Shinn instrument were sent to 51 teachers to determine teacher perceptions of the essential processes of formal teacher evaluation. The teachers were asked to rate each item as (1) Essential, (2) Desirable, (3) Acceptable, or (4) Not Acceptable.

Thirty two of the teachers (62.7%) returned usable responses.

The instrument was scored with items rated as essential receiving one point; desirable, two points; acceptable, three points; and not acceptable, four points. Table 17 shows the ranked mean scores of the ratings.

Items receiving a mean score between 1.00 and 1.75 were rated as essential in formal teacher evaluation. Those items were:

Item 3. I met with the teacher prior to the observation (score 1.52).

Item 4. I found out what the teacher expected the students to be doing during the visit (score 1.48).

Item 5. I found out what concerns or problems the teacher had (score 1.52).

Item 20. I remained in the classroom for at least 30 minutes when I visited (score 1.43).

Item 25. I met with the teacher after the observations (score 1.16).

Item 26. I solicited the teacher's analysis of the data (score 1.29).

Item 27. I encouraged the teacher to make inferences and to express feelings and opinions about the observational data (score 1.19).

Item 28. I encouraged the teacher to consider alternative teaching techniques and explanations of classroom events (score 1.71).

Item 30. I gave praise and encouragement for specific growth in the teacher's teaching skills (score 1.32).

Item 31. I recommended resources such as books and training programs which dealt with areas in which the teacher wished to improve (score 1.45).

Item 32. I developed recommendations to assist the teacher improve instruction (score 1.39).

Item 33. I developed recommendations in cooperation with the teacher (score 1.23).

Item 34. I developed a plan of assistance for the teacher as an outcome of the evaluation (score 1.47).

Item 35. I gave the teacher a copy of the evaluation report (score 1.10).

Item 36. The teacher was given the opportunity to respond in writing to the report (score 1.32).

Item 37. The teacher had recourse to a formal appeal procedure if he/she challenged the report (score 1.32).

The sixteen items identified by teachers as essential form a subset of the improvement of instruction items. The most notable differences, however, fall in the areas related to the establishment of standards and the collection of objective data. Teachers rate all of these items lower than

either of the groups of experts, and NO objective data collection strategies were rated as essential by teachers. In addition, teachers rated the teacher input items (items 4, 5, 27, and 28) higher than the other groups.

This pattern of responses by teachers suggests to the researcher that teachers are anxious about the purposes of formal teacher evaluation, and, notwithstanding the data presented earlier, perceive the process as punitive. Thus, they tend to rate those items related to the establishment of standards and the collection of objective data (essential components of any dismissal process) lower than the experts.

Actual Evaluative Practices Used by the Study Group

Section three of the questionnaire was the Modified Acheson/Shinn Instrument designed to acquire data on the supervisory activities used in the last formal teacher evaluation. Respondents were asked to respond "Yes" or "No" to the items.

To ensure that the instrument was, in fact, a scale with no anomalous items, each item was examined with respect to the total score and an analysis of variance was carried out to compare the difference between "yes" and "no" responses. For all items, the mean score achieved by "yes" respondents was higher than that achieved by "no" respondents and, with the exception of items 14 and 17, the difference was significant well beyond the .01 level. Items

14 and 17 had so few "yes" (six to item 14, one to item 17) responses that, although the mean for the "yes" response was greater than for the "no" response in both cases, the difference was not statistically significant. It was therefore concluded that the instrument was a scale and that there were no anomalous items.

Table 18 reports, in rank order, the percentage of superintendents who responded "yes" to each of the items on the Modified Acheson/Shinn Instrument. Similarly, Table 19 reports the data on other central office staff responses, and Table 20, the principals' data. Table 21 reports the consolidated data for all respondents and Table 22 presents a comparative ranking of "yes" responses.

Noteworthy differences occurred on ten items:

For Item 3 (I met with the teacher prior to the observation), just less than half the superintendents, over three quarters of the other central office staff, and 86.7% of principals reported a "yes" response.

As might be expected, an appeal procedure (Item 37) was more readily available when the evaluation was carried out by a principal (91.5%) than by other central office staff (87.7%) or by the superintendent (69%).

Superintendents and other central office staff ranked higher than principals in recording student/teacher interactions (Item 19), recording impressions about the classroom (Item 8), the examination of students' work (Item

TABLE 18. Percentage of Superintendents Who Responded "Yes" to Items on the Modified Acheson/Shinn Instrument

Item #	Descriptor	Percentage of "Yes" Responses n = 71	Rank
25	Met with teacher after observation	98.6%	1
20	Observed for at least 30 minutes	95.8%	2
19	Recorded student/teacher interactions	94.4%	3
8	Recorded impressions about classroom	93.0%	5
24	Examined student work	93.0%	5
35	Teacher received a copy of report	93.0%	5
21	Examined teacher's planbooks	91.5%	7
5	Found teacher concerns	90.1%	8
23	Examined record of student achievement	84.5%	10
30	Gave praise and encouragement	84.5%	10
32	Developed recommendations	84.5%	10
12	Recorded data on on-task behavior	81.7%	12
4	Found teacher expectations of students	78.9%	13
27	Encouraged teacher inferences & opinions	77.5%	14.5
36	Teacher could respond in writing	77.5%	14.5
22	Compared with Alberta Program of Studies	76.1%	16
26	Solicited teacher analysis of data	70.4%	17.5
28	Encouraged consideration of alternatives	70.4%	17.5
37	Appeal procedure available	69.0%	19
11	Recorded data on student responses	60.6%	20
9	Made notes of classroom dialogue	59.2%	21.5
10	Recorded data on teacher questions	59.2%	21.5
13	Recorded data on patterns of response	56.3%	23
2	Standards of performance developed	54.9%	24
3	Met prior to observation	49.3%	25
18	Recorded data on specific student	47.9%	26
33	Developed recommendations with teacher	45.1%	27
15	Recorded data on teacher movement	43.7%	28
16	Recorded data on student movement	40.8%	29
1	Had written job description	35.2%	30.5
31	Recommended resources	35.2%	30.5
34	Developed a plan of assistance	32.4%	32
6	Suggested observational techniques	29.6%	33
29	Listened more than I talked	28.2%	34
7	Teacher chose observational strategies	22.5%	35
14	Made audio recordings	1.4%	36
17	Made video recordings	0%	37

TABLE 19. Percentage of Other Central Office Staff Who Responded "Yes" to Items on the Modified Acheson/Shinn Instrument

Item #	Descriptor	Percentage of "Yes" Responses n = 65	Rank
20	Observed for at least 30 minutes	100 %	1.5
25	Met with teacher after observation	100 %	1.5
21	Examined teacher's planbook	95.4%	4.5
24	Examined student work	95.4%	4.5
8	Recorded impressions about classroom	95.4%	4.5
35	Teacher received a copy of report	95.4%	4.5
12	Recorded data on on-task behavior	93.8%	8
30	Gave praise and encouragement	92.3%	7
27	Encouraged teacher inferences & opinions	90.8%	9
5	Found teacher concerns	89.2%	10.5
19	Recorded student/teacher interactions	89.2%	10.5
37	Appeal procedure available	87.7%	12.5
32	Developed recommendations	87.7%	12.5
36	Teacher could respond in writing	86.2%	14
4	Found teacher expectations of students	84.6%	15
26	Solicited teacher analysis of data	83.1%	16
28	Encouraged consideration of alternatives	81.5%	17.5
10	Recorded data on teacher questions	81.5%	17.5
11	Recorded data on student responses	80.0%	19
3	Met prior to observation	76.9%	20.5
23	Examined record of student achievement	76.9%	20.5
22	Compared with Alberta Program of Studies	67.7%	22
9	Made notes of classroom dialogue	66.2%	23
18	Recorded data on specific student	64.6%	24
33	Developed recommendations with teacher	63.1%	25
2	Standards of performance developed	58.5%	26
31	Recommended resources	53.8%	27
15	Recorded data on teacher movement	52.3%	28
16	Recorded data on student movement	50.8%	29
1	Had written job description	49.2%	30
13	Recorded data on patterns of response	47.7%	31
34	Developed a plan of assistance	44.6%	32
29	Listened more than I talked	35.4%	33
7	Teacher chose observational strategies	29.2%	34
6	Suggested observational techniques	27.7%	35
14	Made audio recordings	1.5%	36.5
17	Made video recordings	1.5%	36.5

TABLE 20. Percentage of Principals Who Responded "Yes" to Items on the Modified Acheson/Shinn Instrument

Item #	Descriptor	Percentage of "Yes" Responses n = 211	Rank
25	Met with teacher after observation	97.6%	1
35	Teacher received a copy of report	95.7%	2
30	Gave praise and encouragement	94.3%	3
20	Observed for at least 30 minutes	93.8%	4
37	Appeal procedure available	91.5%	5
27	Encouraged teacher inferences & opinions	89.1%	6
36	Teacher could respond in writing	88.6%	7
19	Recorded student/teacher interactions	87.7%	8
12	Recorded data on on-task behavior	86.7%	9.5
3	Met prior to observation	86.7%	9.5
24	Examined student work	86.3%	11
8	Recorded impressions about classroom	85.3%	12
4	Found teacher expectations of students	82.5%	13.5
5	Found teacher concerns	82.5%	13.5
26	Solicited teacher analysis of data	80.6%	15
21	Examined teacher's planbook	74.4%	16
28	Encouraged consideration of alternatives	67.3%	17
11	Recorded data on student responses	65.9%	18.5
32	Developed recommendations	65.9%	18.5
33	Developed recommendations with teacher	64.9%	20
10	Recorded data on teacher questions	63.0%	21
22	Compared with Alberta Program of Studies	62.1%	22
2	Standards of performance developed	60.7%	23
9	Made notes of classroom dialogue	53.1%	24
13	Recorded data on patterns of response	51.2%	25
23	Examined record of student achievement	48.8%	26
18	Recorded data on specific student	47.4%	27
15	Recorded data on teacher movement	45.5%	28.5
16	Recorded data on student movement	45.5%	28.5
29	Listened more than I talked	43.6%	30
1	Had written job description	43.1%	31
7	Teacher chose observational strategies	41.2%	32
31	Recommended resources	37.9%	33
6	Suggested observational techniques	37.0%	34
34	Developed a plan of assistance	34.6%	35
14	Made audio recordings	1.9%	36
17	Made video recordings	0%	37

TABLE 21. Percentage of Evaluators Responding "Yes" to Items on the Modified Acheson/Shinn Instrument

Item #	Descriptor	Percentage of "Yes" Responses n = 347	Rank
25	Met with teacher after observation	98.3%	1
20	Observed for at least 30 minutes	95.4%	2
35	Teacher received a copy of report	95.1%	3
30	Gave praise and encouragement	91.9%	4
19	Recorded student/teacher interactions	89.3%	5.5
24	Examined student work	89.3%	5.5
8	Recorded impressions about classroom	88.8%	7
12	Recorded data on on-task behavior	87.0%	8.5
27	Encouraged teacher inferences & opinions	87.0%	8.5
37	Appeal procedure available	86.2%	10
36	Teacher could respond in writing	85.9%	11
5	Found teacher concerns	85.3%	12
4	Found teacher expectations of students	82.1%	13
21	Examined teacher's planbook	81.8%	14
26	Solicited teacher analysis of data	79.0%	15
3	Met prior to observation	77.2%	16
32	Developed recommendations	73.8%	17
28	Encouraged consideration of alternatives	70.6%	18
11	Recorded data on student responses	67.4%	19
22	Compared with Alberta Program of Studies	66.0%	20
10	Recorded data on teacher questions	65.7%	21
23	Examined record of student achievement	61.4%	22
33	Developed recommendations with teacher	60.5%	23
2	Standards of performance developed	59.1%	24
9	Made notes of classroom dialogue	56.8%	25
13	Recorded data on patterns of response	51.6%	26
18	Recorded data on specific student	50.7%	27
15	Recorded data on teacher movement	46.4%	28
16	Recorded data on student movement	45.5%	29
1	Had written job description	42.7%	30
31	Recommended resources	40.3%	31
29	Listened more than I talked	38.9%	32
34	Developed a plan of assistance	36.0%	33
7	Teacher chose observational strategies	35.2%	34
6	Suggested observational techniques	33.7%	35
14	Made audio recordings	1.7%	36
17	Made video recordings	0.3%	37

TABLE 22. Comparative Ranking of "Yes" Responses to Items on the Acheson/Shinn Instrument

Item #	Descriptor	Rank			
		A*	S	O	P
25	Met with teacher after observation	1	1	1.5	1
20	Observed for at least 30 minutes	2	2	1.5	4
35	Teacher received a copy of report	3	5	4.5	2
30	Gave praise and encouragement	4	10	7	3
19	Recorded student/teacher interactions	5.5	3	10.5	8
24	Examined student work	5.5	5	4.5	11
8	Recorded impressions about classroom	7	5	4.5	12
12	Recorded data on on-task behavior	8.5	12	8	9.5
27	Encouraged teacher inferences & opinions	8.5	14.5	9	6
37	Appeal procedure available	10	19	12.5	5
36	Teacher could respond in writing	11	14.5	14	7
5	Found teacher concerns	12	8	10.5	13.5
4	Found teacher expectations of students	13	13	15	13.5
21	Examined teacher's planbook	14	7	4.5	16
26	Solicited teacher analysis of data	15	17.5	16	15
3	Met prior to observation	16	25	20.5	9.5
32	Developed recommendations	17	10	12.5	18.5
28	Encouraged consideration of alternatives	18	17.5	17.5	17
11	Recorded data on student responses	19	20	19	18.5
22	Compared with Alberta Program of Studies	20	16	22	22
10	Recorded data on teacher questions	21	21.5	17.5	21
23	Examined record of student achievement	22	10	20.5	26
33	Developed recommendations with teacher	23	27	25	20
2	Standards of performance developed	24	24	26	23
9	Made notes of classroom dialogue	25	21.5	23	24
13	Recorded data on patterns of response	26	33	21	35
18	Recorded data on specific student	27	26	24	27
15	Recorded data on teacher movement	28	28	28	28.5
16	Recorded data on student movement	29	29	29	28.5
1	Had written job description	30	30.5	30	31
31	Recommended resources	31	30.5	27	33
29	Listened more than I talked	32	34	33	30
34	Developed a plan of assistance	33	32	32	35
7	Teacher chose observational strategies	34	35	34	32
6	Suggested observational techniques	35	33	35	34
14	Made audio recordings	36	36	36.5	36
17	Made video recordings	37	37	36.5	37

Spearman Rank Order Correlation Coefficients:

S:O $r = .94$; $p < .01$ S:P $r = .84$; $p < .01$ O:P $r = .90$; $p < .01$

* A = All respondents; S = Superintendents; O = Other Central Office Staff; P = Principals

24), and the examination of the teacher's planbook (Item 21). In addition, superintendents placed a much greater emphasis upon the examining the record of student achievement (Item 23).

Principals, more than other central office staff, and superintendents, encouraged teacher input in the post observation conference (Item 27), gave praise and encouragement more frequently (Item 30), and provided more opportunity for the teacher to respond to the report in writing (Item 36).

Superintendents developed recommendations to help the teacher improve instruction (Item 32) more frequently than other central office staff or principals.

Table 23 reports the percentage of superintendents, other central office staff, and principals who attained the minimum criteria in the areas of due process, the improvement of instruction, and teacher perception. The minimum criteria for satisfactory evaluation in each of these areas was defined as the subset of the items receiving a mean score of between one and 1.75 (as rated by the experts) on the modified Acheson/Shinn Instrument.

Of the 347 evaluations reported, only 15 met the minimum criteria for assuring due process. Other central office staff achieved a higher rate of meeting the criteria than did superintendents, who in turn did better than principals. An analysis of variance of the mean scores on

TABLE 23. Percentage of the Study Group Attaining the Minimum Criteria in the Areas of Due Process, the Improvement of Instruction and Teacher Perception

	Superintendents N = 71	Other Central Office Staff N = 65	Principals N = 211
Due Process	4.2%	10.8%	2.4%
Improvement of Instruction	1.4%	0%	1.4%
Teacher Perception	2.8%	16.9%	8.1%

due process items showed a difference in the means, significant at the .01 level. Other central office staff scored higher than principals who in turn were higher than superintendents. The mean score for all respondents was 12.5 (out of 17 due process items).

The items rated essential for assuring due process that were not used by more than 50% of the respondents included:

Item 34, the development of a plan of assistance (superintendents, other central office staff, and principals).

Item 31, the recommendation of resources (superintendents and principals).

Item 23, the examination of the record of student achievement (principals).

Item 33, the development of recommendations in cooperation with the teacher (superintendents).

One superintendent and three principals met the minimum criteria for the improvement of instruction. Analysis of variance of the mean scores on improvement of instruction items showed a difference in the means, significant at the .01 level, with other central office staff higher than principals who in turn were higher than superintendents. The mean score on the 25 improvement of instruction items was 18.6.

The items essential for improvement of instruction that were not used by more than 50% of the respondents included:

Item 34, the development of a plan of assistance (superintendents, other central office staff, and principals).

Item 29, I listened more than I talked (superintendents, other central office staff, and principals).

Item 31, the recommendation of resources (superintendents and principals).

Item 33, the development of recommendations in cooperation with the teacher (superintendents).

Item 3, meeting prior to the observation (superintendents).

Twenty nine respondents, two superintendents (2.8%), 11 other central office staff (16.9%), and 17 principals (8.1%) met the minimum criteria established by teachers. Analysis of variance of the mean scores on teacher perception items showed a difference in the means, significant at the .01 level, with other central office staff higher than principals who in turn were higher than superintendents. Of the 16 items identified by teachers as essential to formal teacher evaluation, respondents achieved a mean score of 12.5.

The items perceived by teachers to be essential in a formal evaluation that were not used by more than 50% of the respondents included:

Item 34, the development of a plan of assistance

(superintendents, other central office staff, and principals).

Item 31, the recommendation of resources (superintendents and principals).

Item 33, the development of recommendations in cooperation with the teacher (superintendents).

Item 3, meeting prior to the observation (superintendents).

Relationships Between Demographic Factors and Scores on the Modified Acheson/Shinn Instrument

Introduction

Of the 37 items on the Modified Acheson/Shinn Instrument, 26 were rated by the experts as essential to the improvement of instruction and the assurance of due process in formal teacher evaluation. Of the remaining 11 items, all but items 14 and 17 (audio and video recording of lessons) were rated by all groups as desirable or acceptable evaluation strategies. Experts in due process rated items 14 and 17 as marginally unacceptable; however, the use of audio and video tapes in the evaluation of teaching is a well established practice and is one of the recommended strategies in the clinical supervision model (Acheson & Gall, 1980, p. 132).

The scores on the entire instrument correlate highly with the scores on the subsets of items rated as essential

to assuring due process ($r = .89$) and for the improvement of instruction ($r = .95$); thus, the score on the instrument is regarded as a determinant of the "completeness" of the evaluation. The higher the score, the more complete the evaluation.

The section that follows reports the statistical relationships between the respondents' demographic characteristics and the completeness of their last formal teacher evaluation. In the interests of readability, statistical data will be reported in Appendix D, and the text on the following pages will merely report and discuss the statistical patterns.

Experience

To explore the relationship between years of experience as a teacher evaluator and the completeness of the evaluation, the Pearson product-moment correlation coefficient was calculated. Initial calculation of the coefficient suggested a very slight, non significant, negative correlation between the number of years of experience as a teacher evaluator and the score on the instrument. A recalculation of the coefficient broken down by administrator category, revealed no statistically significant relationship for other central office staff and principals. However, superintendents showed a negative correlation ($r = -0.24$) significant at the .05 level. This

means that more experienced superintendents in this study tended to score lower than those with less experience.

It is possible that this somewhat unexpected finding is caused by the fact that almost one third of Alberta superintendents have 16 or more years of experience as a teacher evaluator, and thus may well have learned their evaluation strategies in a period when the inspectorial model was prevalent, strategies that are incompatible with the clinical supervision model upon which the instrument is based.

University Courses

Calculation of the Pearson correlation coefficient shows a significant relationship ($r = .14$; $p < .01$) between the score on the instrument and the number of university courses in the evaluation of teachers undertaken by the respondents. The more university courses taken, the higher the score on the instrument. Superintendents averaged the greatest number of university courses, followed by other central office staff, and principals (Table 2).

Inservice Training

No statistically significant relationship was found between the score on the instrument and inservice training; however, a low but significant ($r = .1$; $p < .05$) positive correlation existed between inservice training and the score

on the due process subset. Respondents with more inservice training scored higher on the due process subset. Other central office staff had more inservice training than superintendents or principals (Table 3).

Number of Teachers

To examine the relationship between the completeness of the evaluation and the number of teachers supervised (for superintendents this means the number of teachers in the jurisdiction; for other central office staff, the number of teachers in their area of responsibility; and for principals, the number of teachers in their school), the Pearson product-moment correlation coefficient was calculated. A statistically significant ($r = .15$; $p < .01$), positive relationship was found between the score on the due process subset and the number of teachers supervised. No significant relationships were found between the number of teachers supervised and the completeness of the evaluation, the improvement of instruction subset, or the teacher preference subset.

When the same test was used to examine the relationship between the number of teachers evaluated and the completeness of the evaluation, a positive correlation, significant at the .05 level, was found. In addition, significant correlations exist between the number of teachers evaluated and the due process subset ($r = .16$;

$p < .01$), and the improvement of instruction subset ($r = .1$; $p < .05$). No statistically significant relationship was found in the case of the teacher preference subset.

Category of Teacher

To determine what differences existed in the evaluative practices of respondents with respect to the category of teacher evaluated (i.e., first year, experienced but new to the school/system, or tenured), an analysis of variance of the mean scores of respondents, broken down by teacher category, was carried out. No significant differences in the means were found.

Presence of Policy

Respondents were asked to indicate (yes, no, or unsure) whether their jurisdiction had a written policy on teacher evaluation (Table 4). Although the mean for "yes" responses was higher than that for the "unsure" responses, which in turn was higher than for the "no" responses, an analysis of variance showed no significant differences between the means indicating that chance factors alone could account for the variation.

This means that the perceived presence (or absence) of policy has no relationship with the completeness of the evaluation carried out by respondents.

Adherence to Policy

No significant relationship was found between the reported level of adherence to the teacher evaluation policy and the completeness of the evaluation, nor to the due process, improvement of instruction, or teacher preference subsets. This means that the completeness of the evaluation was unrelated to the degree of adherence to teacher evaluation policy.

Classroom Visits

The Pearson product-moment correlation coefficient was calculated to examine the relationship between the number of classroom visits made, and the completeness of the evaluation. A statistically significant positive correlation was found ($r = .13$; $p = .01$). Similarly, the relationship between the time spent in classroom observation, and the completeness of the evaluation was examined, and a significant positive correlation was found ($r = .3$; $p < .01$).

The possible relationships between grade levels observed, or subjects observed, and the completeness of the evaluation were examined by using an analysis of variance of the mean scores of respondents, broken down by grade or subject level. No significant differences in the means were found relating to the grade level observed. A similar result was obtained for all subjects except for science.

Respondents who observed science lessons scored significantly higher ($p < .05$) than those who did not.

This means that evaluators who make more classroom visits, or who spend more time in observations, tend to do a more complete evaluation than those who visit less often, or spend less time in observation. The grade level and subject observed (except for science) make no difference to the completeness of the evaluation.

Purpose of the Evaluation

Respondents were given a list of ten purposes for evaluation and were asked to indicate the primary purpose of the last formal evaluation. The difference between mean scores on the modified Acheson/Shinn instrument (the completeness measure) of respondents who checked a given item, and those who did not, was examined using analysis of variance. No significant differences in the means were found when the purpose was: awarding a permanent contract, providing a basis for dismissal, providing a basis for transfer, providing a basis for promotion, providing a basis for retention in position, determining the inservice needs of the teacher, or when the respondent checked the "other" category.

A significantly higher mean score was obtained by respondents when the purpose was to record the performance of a resigning or retiring teacher ($p < .05$) or when the

purpose was to improve the performance of the teacher ($p < .01$).

A significantly lower mean score was obtained when the purpose was related to recommending permanent certification.

This means that respondents whose primary purpose was to improve the performance of the teacher, or to record the performance of a resigning or retiring teacher, tended to do a more complete evaluation than respondents who did not have these primary purposes. Respondents whose primary purpose was related to recommending for permanent certification tended to do a less complete evaluation.

Initiating Factors

Respondents were given a list of six initiating factors and were asked to indicate the primary initiating factor in the last formal evaluation. The difference between mean scores on the modified Acheson/Shinn instrument (the completeness measure) or respondents who checked a given item, and those who did not, was examined using analysis of variance. No significant differences in the means were found when the initiating factor was: a parental complaint, concerns arising from informal observations, a teacher request, the need for documentation, or when respondents checked the "other" category. The mean score was significantly higher ($p < .05$) when the evaluation was initiated as a routine evaluation according to district

policy than when it was not.

Outcome of the Evaluation

Respondents were given a list of nine possible outcomes and were asked to indicate the outcome of the last formal evaluation. The difference between mean scores on the modified Acheson/Shinn instrument (the completeness measure) of respondents who checked a given item, and those who did not, was examined using analysis of variance. No significant differences in the means were found when the outcome was: the teacher was/will be awarded a permanent contract, the teacher was/will be dismissed, the teacher was/will be promoted, the teacher will continue in present position, the teacher was/will be evaluated by another evaluator, the teacher challenged the evaluation report, or when the respondents checked the "other" category.

The mean score for respondents was significantly higher ($p < .01$) when, as a result of the evaluation, an inservice plan was developed for the teacher, and significantly lower ($p < .01$) when the evaluation resulted in a recommendation for permanent certification.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Introduction

The case of James Keegstra (Keegstra v. County of Lacombe, 1983), who was dismissed from his teaching position after it was revealed that he had been teaching a social studies program that differed substantially from the authorized Alberta curriculum, rekindled public and political interest in the evaluation of teachers. This renewed interest contributed to the development, in 1984, of a teacher evaluation policy by Alberta Education. In essence, this policy requires that Alberta school jurisdictions put into place fair and consistent board policies to assure the regular evaluation of teachers for the purposes of (1) assisting in the professional development of teachers, and (2) taking appropriate action with respect to teachers whose performance is unacceptable.

This study provides benchmark data for assessing the impact of the Alberta Education policy, and information to stakeholder groups on current practices and the minimum criteria to be met for satisfactory teacher evaluation.

The primary purpose of this study was to describe the state of formal teacher evaluation in Alberta in the 1983-84

school year. The specific aims were:

1. To collect demographic information about the evaluators and teachers involved in formal teacher evaluation in Alberta.
2. To describe the initiating factors, intended purposes and outcomes of formal teacher evaluation.
3. To describe the procedures used by evaluators in formally evaluating teachers.
4. To analyze the quality of teacher evaluation procedures with respect to minimum requirements to improve instruction and to assure due process.
5. To identify the relationships between selected demographic factors and the completeness of the evaluation.

The Literature

The literature related to teacher evaluation is extensive, diverse, and sometimes contradictory. The review of the literature for this study traces the development of evaluation from its beginnings as an inspectoral, autocratic process, through the "scientific" and "democratic" models of the early twentieth century to the multigoal, democratic interactive process exemplified by Acheson's (1982) model of the clinical supervision process.

The literature identifies a great many purposes for teacher evaluation, but they can all be incorporated into

two major categories, namely purposes related to the improvement of the teacher's instructional performance, and purposes involving judgemental functions related to decision making and teacher competency.

The profound impact of the evaluation of teachers on student learning is dealt with in some early literature, but more recent research has focussed upon teaching behaviors rather than student outcomes.

Teacher evaluation in Alberta is the subject of a great many opinion articles but few research studies. The studies that have been made tend to focus upon the superintendent's perception of the policies and practices prevalent in their jurisdiction; however, one recent study (Townsend, 1984) documented the process of implementation of a new policy on teacher supervision and evaluation, and demonstrated that high levels of acceptance and participation, and satisfaction with the process can be attained through appropriate implementation strategies.

The Design of the Study

To assess the state of formal teacher evaluation in Alberta, the following steps were taken:

1. A three part questionnaire, based upon existing instruments, was developed. Section one collected demographic data about the responding evaluator. Section two addressed the "last formal teacher evaluation carried

out," and collected data related to the initiating factors, purposes, and outcomes of that evaluation. Section three, the Modified Acheson/Shinn instrument, collected data on the supervisory practices used in the last formal teacher evaluation.

2. The questionnaire was administered to a study group consisting of all Alberta superintendents, all other central office staff who were members of the Conference of Alberta School Superintendents as of December 1983, and a 25% sample of Alberta school principals.

3. Minimum criteria for satisfactory evaluation in the areas of "due process" and "improvement of instruction" were established by submitting Section 3 of the questionnaire, the Modified Acheson/Shinn instrument, to experts for adjudication. Teacher perceptions of appropriate evaluation strategies were assessed by administering the Modified Acheson/Shinn instrument to a sample of teachers.

4. Data from the questionnaires were processed using the SPSSX Sprint package. Frequency distributions and means were generated for all variables. Ratings by experts and teachers of the 37 items on the Modified Acheson/Shinn instrument were summed and averaged and three subsets delineating the minimum criteria for satisfactory evaluation in the areas of due process, improvement of instruction, and teacher perception were generated. Demographic factors were described and the relationships between the demographic

variables and the scores on the Modified Acheson/Shinn instrument and its subsets were examined.

Findings

1. On average, superintendents had 13.8 years experience in teacher evaluation, had undertaken 1.87 university courses related to teacher evaluation, and had engaged in 18.5 hours of related inservice training in the last five years. By comparison, other central office staff had 11.4 years experience, 1.76 university courses, and 23.4 hours of inservice training. Principals averaged 9.3 years experience, had taken 1.0 university courses, and 14.9 hours of inservice training.

2. Not all respondents were involved in teacher evaluation during the study period but 71.7% of superintendents, 67% of other central office staff, and 73.3% of principals reported that they had evaluated one or more teachers. Of the respondents who did evaluate teachers, superintendents averaged 20.8 teachers, other central office staff, 25.1 teachers and principals, 8.7 teachers.

3. During the study period, respondents reported a total of 4,924 evaluations performed. Of these, superintendents did 29.5%, other central office staff did 33.1%, and principals did 37.3%. Of the evaluations performed, 21.9% were of first year teachers, 17.3% were of

experienced teachers new to the school/system, and 60.8% were tenured.

4. Respondents, especially superintendents, generally rated teacher evaluation as a high priority item in relation to all their other duties, but most respondents considered the time available to be inadequate. Respondents who rated teacher evaluation as a high priority scored significantly higher on the Modified Acheson/Shinn instrument, the measure of the completeness of the evaluation; however, the perceived amount of time available had no significant impact on the completeness of the evaluation.

5. Over 80% of respondents indicated that their jurisdiction had a written policy on formal teacher evaluation, but less than 50% of the respondents who evaluated teachers followed the policy "strictly to the letter." Neither the presence of policy, nor the degree to which it was followed, related significantly to the completeness of the evaluation.

6. Over 80% of respondents made two or more classroom visits during the last formal teacher evaluation, and the average time spent in classroom observation was over two hours. Junior high teachers comprised the largest group of teachers evaluated and language arts and math were the subjects most commonly observed. Respondents who made more classroom visits or spent more time in classroom observation during the last formal teacher evaluation scored

significantly higher on the completeness measure than those who visited less often, or spent less time in observation. The grade level and subject observed (except science) was not significantly related to the completeness of the evaluation.

7. The majority of the last formal teacher evaluations carried out by the study group were initiated as routine evaluations according to school board policy. Their primary purposes were: to improve the performance of the teacher, to award a permanent contract, to provide a basis for retention in position, or to recommend for permanent certification. As a result of the evaluation, most teachers were retained in their present position, received a permanent contract or were recommended for permanent certification. Teacher dismissal was cited as a primary purpose of the evaluation by 4.1% of respondents and was reported as an outcome of the evaluation by 4.8% of respondents. Formal teacher evaluation was rarely used as a basis for transfer or promotion.

8. When the evaluation was initiated as a routine evaluation according to district policy, respondents scored significantly higher on the completeness measure than when they did not. Other initiating factors were not significant in affecting the completeness of the evaluation.

When the primary intended purpose of the last formal evaluation was to improve the performance of the teacher, or

to record the performance of a resigning or retiring teacher, respondents scored significantly higher on the completeness measure than when it was not. When the purpose was to recommend for permanent certification, respondents scored significantly lower on the completeness measure. Other intended purposes did not significantly influence the respondents' score on the completeness measure.

When, as a result of the evaluation, an inservice plan was developed for the teacher, respondents scored higher on the completeness measure than when no plan was developed. If the teacher was recommended for permanent certification as a result of the evaluation, the respondents scored significantly lower on the completeness measure.

9. Experts identified 17 of the 37 items on the Modified Acheson/Shinn instrument as essential to assuring due process in formal teacher evaluation. In essence, the items related to due process suggest that: (a) standards of performance must be developed for the teacher, (b) a variety of objective data must be collected, (c) a post conference must be held with the teacher to discuss the data and develop recommendations for improvement, (d) a plan of assistance must be developed for the teacher, and (e) the teacher must be given a copy of the evaluation report and the opportunity to respond in writing.

Experts in improvement of instruction identified 25 of the Modified Acheson/Shinn items as essential. In essence

the improvement of instruction criteria would require that the due process criteria be met, and: (a) a preconference must be held to discover what the teacher expected the students to be doing, and to discern what problems or concerns the teacher had, (b) during the post conference, greater teacher input should be sought and appropriate praise and encouragement given, and (c) a formal appeal procedure should be available if the teacher challenged the report.

10. The sixteen items identified as essential by teachers form a subset of the improvement of instruction items. The most notable differences fall in the areas related to the establishment of standards and the collection of objective data. Teachers rate these items lower than either of the groups of experts, and no objective data collection strategies were rated as essential by teachers. In addition, teachers rated teacher input items higher than either group of experts.

11. The patterns of "yes" responses to the 37 items on the Modified Acheson/Shinn instrument were somewhat similar for superintendents, other central office staff, and principals; however, noteworthy differences occurred on ten items:

Less than half the superintendents, but more than three quarters of other central office staff and principals met with the teacher prior to the classroom observation (Item 3).

An appeal procedure (Item 37) was more likely to be made available when the evaluation was carried out by a principal (91.5%), than when carried out by other central office staff (87.7%), or superintendents (69%).

Superintendents and other central office staff were more likely than principals to record student/teacher interactions (Item 19), record impressions about the classroom (Item 8), examine students' work (Item 24), and examine the teacher's planbook (Item 21). In addition, superintendents placed a greater emphasis upon the examination of the record of student achievement (Item 23).

Principals, more than other central office staff, and superintendents: encouraged teacher input in the post observation conference (Item 27), gave praise and encouragement (Item 30), and provided the opportunity for the teacher to respond to the report in writing (Item 36).

Superintendents developed recommendations to help the teacher improve instruction (Item 32) more frequently than other central office staff or principals.

12. Few of the respondents met the minimum criteria to assure due process (4.5%), and fewer met the criteria for the improvement of instruction (1.3%). Essential due process items not used in the last evaluation by more than 50% of respondents were:

Item 34, the development of a plan of assistance (superintendents, other central office staff, and

principals).

Item 31, the recommendation of resources (superintendents and principals).

Item 23, the examination of the record of student achievement (principals).

Item 33, the development of recommendations in cooperation with the teacher (superintendents).

The items essential for the improvement of instruction that were not used by more than 50% of respondents included Items 34, 31, and 33 as noted above and:

Item 29, I listened more than I talked (superintendents, other central office staff, and principals).

Item 3, I met with the teacher prior to the observation (superintendents).

Twenty nine (8.3%) of the respondents met the minimum criteria established in the teacher perception subset. The items deemed essential by teachers that were not used by more than 50% of respondents were Items 34, 31, 33, and 3 as noted above.

Conclusions and Implications

Demographic Factors

The demographic factors that relate to the respondents and that are correlated with a significantly more complete

evaluation are: the placing of a high priority on teacher evaluation, and high levels of university training. In addition, a positive correlation exists between these two factors.

Experience (except in the case of superintendents), the amount of inservice training, the number of teachers supervised and the adequacy of the time available for teacher evaluation were not significantly related to completeness.

This implies that, in the selection of personnel who will have a major responsibility in the area of teacher evaluation, the primary criteria should include those related to a commitment to teacher evaluation and adequate related university training.

Inservice Training

The lack of a significant relationship between inservice training and the completeness of the evaluation is almost certainly due to the model of inservice training commonly in use in Alberta, namely the "single shot," one or two day lecture or workshop. Studies by Joyce and Showers (1981) indicate that, for inservice training to cause a change in behavior, five training elements are essential: theory, demonstration, practice, feedback, and coaching. The "single shot" strategy can, at best, encompass the first four of these components. This, say Joyce and Showers, can

result in a transfer effect of up to 10% at the classroom level. To achieve a substantial effect, all five elements, used in sequence are required. When this is done, a 90% transfer effect can be achieved.

The potential for the successful implementation of this model in Alberta is demonstrated by the positive outcomes reported in Townsend's (1984) study of the implementation of a policy on teacher evaluation in the Lethbridge School District # 51.

The implications of the present lack of a relationship between inservice training and completeness of evaluation, the Joyce and Showers (1981) research, and the Townsend (1984) study are far reaching. They suggest that, if a change in the evaluative behavior of superintendents, other central office staff, and principals is to be effected, the whole process of inservice training in Alberta should be restructured.

Policy

This study found no relationship between the presence of a written policy on formal teacher evaluation and the completeness of the last evaluation, nor was the level of adherence to policy significantly related to completeness; however, routine evaluations, initiated in accordance with board policy tended to be more complete than those not initiated for this reason. This suggests that school board

policies may serve no useful purpose, except to initiate teacher evaluation.

In the preliminary stages of this study in 1983, the researcher collected and examined the teacher evaluation policies from the majority of Alberta school jurisdictions and encountered an incredible diversity of policies. They ranged from complex policies that incorporated clearly delineated strategies and instruments, to brief statements of intent; from policies clearly designed to assure due process, to policies that obviously contravened recent human rights legislation. This informal survey confirmed Reikie's (1977, p. v) statement that "Overall, there were few school systems with clearly structured evaluation policies and practices. Numerous jurisdictions appeared to have no policies regarding many facets of teacher evaluations. Among the jurisdictions there was a wide variety of practices. Few practices were found to be consistent across Alberta."

The absence of a relationship between policy and the completeness of teacher evaluation, and the documented lack of consistency of teacher evaluation policies across the province suggests that the development of teacher evaluation policies at the local board level may be an ineffective mechanism for the implementation of teacher evaluation practices across the province.

The State of Oregon, U.S.A., has adopted a statewide

model which prescribes a basic form of teacher evaluation, consistent with the clinical supervision model, yet leaves local boards considerable autonomy within its basic guidelines. That model is delineated in Oregon Revised Statute 342.850:

Teacher evaluation; form; personnel file content. (1)

The district superintendent of every school district, including superintendents of education service districts, shall cause to have made at least annually but with multiple observations an evaluation of performance for each probationary teacher employed by the district and at least biennially for every other teacher. The purpose of the evaluation is to allow the teacher and the district to determine the teacher's development and growth in the teaching profession and to evaluate the performance of the teaching responsibilities. A form for teacher evaluation shall be prescribed by the State Board of Education and completed pursuant to rules adopted by the district school board.

(2) (a) The district school board shall develop an evaluation process in consultation with school administrators and with teachers. If a school district's teachers are represented by a local bargaining organization, the board shall consult with the teachers belonging to and appointed by the local bargaining organization in the consultation required by this paragraph.

(b) The district school board shall implement the evaluation process that includes:

(A) The establishment of job descriptions and performance standards which include but are not limited to items included in the job description;

(B) A preevaluation interview which includes but is not limited to the establishment of performance goals for the teacher, based on the job description and performance standards;

(C) An evaluation based on written criteria which include the performance goals; and

(D) A post-evaluation interview in which (i) the results of the evaluation are discussed with the teacher and (ii) a written program of assistance for improvement, if needed, is established.

(c) Nothing in this subsection is intended to prevent a district from consulting with any other individuals.

(3) Except in those districts having an average daily

membership, as defined by ORS 327.006, of fewer than 200 students, the person or persons making the evaluations must hold teaching certificates. The evaluation shall be signed by the school official who supervised the teacher. A copy of the evaluation shall be delivered to the teacher.

(4) The evaluation reports shall be maintained in the personnel files of the district.

(5) The evaluation report shall be placed in the teacher's file only after reasonable notice to the teacher.

(6) A teacher may make a written statement relating to any evaluation, reprimand, charge, action or any matter placed in the teacher's personnel file and such teacher's statement shall be placed in the personnel file.

(7) The personnel file shall be open for inspection by the teacher, the teacher's designees and the district school board and its designees. District school boards shall adopt rules governing access to personnel files, including rules specifying whom school officials may designate to inspect personnel files.

Minimum Criteria for Satisfactory Evaluation

As the findings of this study show, few respondents met the minimum criteria deemed necessary to assure due process or the improvement of instruction in formal teacher evaluation. The picture, however, is not as bleak as it first may seem, since the findings also reveal that, on average, evaluators carried out almost three quarters of the strategies necessary to meet those requirements and repeating patterns were found in the items commonly omitted. This suggests that with appropriate training, most evaluator performance could be readily upgraded to meet the minimum criteria.

The strategies deemed essential by teachers differed

from those of experts in that teachers gave lower rankings to items related to the establishment of standards and the collection of objective data. This suggests to the researcher that teachers are anxious about evaluation and particularly those processes which are essential in termination cases, namely the due process items. The findings of this study suggest that the great majority of formal evaluations carried out are positive, rather than punitive in intent, and that the apparent fears exhibited by teachers are generally groundless. However, it would be folly to dismiss those fears, since, if one of the primary purposes of evaluation is to improve instruction, a negative perception of some of the essential processes could seriously inhibit the successful implementation of any useful program of evaluation.

Recommendations

As a result of the findings of this study, and the conclusions drawn therefrom, it is recommended that:

1. When engaging personnel whose major responsibility will be the evaluation of teachers, school boards hire persons who place a high priority upon teacher evaluation and who have related university training.

2. When organizing inservice training to upgrade evaluators in their jurisdictions, school boards ensure that the model of inservice training used is one that results in

a change in behavior at the classroom level, namely, one that includes theory, demonstration, practice, feedback, and coaching.

3. That school boards involve classroom teachers in those inservice programs so that they become more knowledgeable, and more committed to the processes of formal evaluation.

4. The Government of Alberta enact legislation to ensure that teacher evaluation is carried out in a fair and consistent manner throughout the province.

Recommendations for Further Study

This study has described the formal teacher evaluation practices in Alberta during the period September 1, 1983 to April 30, 1984, as reported by superintendents, other central office staff, and principals. In addition, it has assessed the adequacy of the current evaluative practices with respect to minimum criteria in the areas of due process and the improvement of instruction, and explored the relationships between the completeness of the evaluation and demographic factors.

One limitation of this study is that it has described the current evaluative practices using data collected from the evaluators, not from those being evaluated. Other studies (e.g. Shinn, 1976) suggest that the perceptions of teachers and administrators may be different and so future

studies might examine the teacher perspective in more depth.

Data collected in this study showed that teachers did not rate the establishment of standards of performance and objective data collection techniques as highly as did experts in due process and improvement of instruction. Future studies might focus on the reasons for this difference and the impact of inservice training upon teacher perceptions.

Joyce and Showers (1981) have demonstrated the need for a model of inservice training that includes theory, demonstration, practice, feedback, and coaching. They suggest that the transfer of knowledge into actual classroom practice occurs when all of these components are used in sequence. Future studies could explore the impact of this inservice model in improving the quality of teacher evaluation in Alberta.

The review of the literature revealed that early in this century, researchers discovered that the evaluation of teachers had a dramatic effect on student outcomes. No recent studies were found describing the relationship between modern teacher evaluation strategies and student performance. Future studies might examine the differences between the performance of students in classrooms where the teachers were evaluated, as opposed to those where no teacher evaluation took place.

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APPENDIX A

THE QUESTIONNAIRE

FORMAL TEACHER EVALUATION IN ALBERTA

This questionnaire surveys current teacher evaluation practice in Alberta. Since it has the potential for identifying needs and proposing solutions for an issue that is of current concern, your cooperation in responding to it is appreciated. The results of the study (which should be of value to you and your colleagues) will be disseminated by the end of the year.

It should take about 10 minutes to complete the questionnaire.

For the purpose of this research project, a formal teacher evaluation is defined as one that includes a written report containing a recommendation or rating.

SECTION 1

Please respond to the following:

1. Position title (*check one*) (1) Superintendent ☐ (2) Other Central Office Staff ☐ (3) Principal ☐
2. How many years experience as a teacher evaluator do you have? ____
3. How many university credit courses in teacher evaluation have you completed? ____
(U.S. graduates count 6 semester hours or 9 term hours as 1 course)
4. How many hours of in-service training in teacher evaluation have you completed in the last 5 years? ____
5. Respond in the appropriate position category:
 Superintendent: How many teachers are in your jurisdiction? ____
 (If you are superintendent of more than one jurisdiction, please indicate the TOTAL number of teachers you are responsible for.)
 Other Central Office: How many teachers are in your area of responsibility? ____
 Principals: How many teachers are in your school? ____
6. How many of these are first year teachers? ____
7. How many are experienced teachers new to your school/system? ____
8. How many are tenured? ____
9. Check to indicate whether your jurisdiction has a written policy on formal teacher evaluation.
 (1) Yes ☐ (2) No ☐ (3) Unsure ☐
10. In relation to all your other duties, rate (*by circling the appropriate number*) the adequacy of the time you have available for teacher evaluation.
 Totally adequate 1 2 3 4 5 Totally inadequate
11. In relation to all of your duties, rate (*by circling the appropriate number*) the priority of formal teacher evaluation.
 Very High Priority 1 2 3 4 5 Very Low Priority

IF YOU HAVE NOT FORMALLY EVALUATED A TEACHER SINCE SEPTEMBER 1, 1983, PLEASE STOP
 HERE AND RETURN THIS SURVEY IN THE SELF-ADDRESSED STAMPED ENVELOPE. THANK YOU.

Of the teachers you formally evaluated between September 1 and April 30 1984.

12. How many were first year teachers? ____
13. How many were experienced teachers new to your school/system? ____
14. How many were tenured? ____

SECTION 2

RECALL THE LAST FORMAL TEACHER EVALUATION YOU CARRIED OUT AND RESPOND TO THE REMAINING QUESTIONS WITH RESPECT TO THAT EVALUATION.

1. The teacher was: (1) A first year teacher ☐ (2) Experienced but new to your school/system ☐ (3) Tenured. ☐
2. Grade level(s) observed _____
3. Subject(s) observed (*check as appropriate*) (1) Math ☐ (2) Language Arts ☐ (3) Social Studies ☐ (4) Sciences ☐ (5) Other ☐ (*Please specify*) _____
4. Number of separate classroom visitations _____
5. Minutes spent in actual classroom observations _____
6. If your jurisdiction has a written evaluation policy, rate (*by circling the appropriate number*) the degree to which you adhered to policy.
Strictly to the Letter 1 2 3 4 5 Not at All
7. Rate, (*by circling the appropriate number*) your perception of the teacher's performance.
Excellent 1 2 3 4 5 Unsatisfactory
8. Check the primary intended purpose of the last formal evaluation.
 1. ☐ Recommending permanent certification
 2. ☐ Awarding a permanent contract
 3. ☐ Providing a basis for dismissal
 4. ☐ Recording the performance of a resigning or retiring teacher
 5. ☐ Providing a basis for transfer
 6. ☐ Improving the performance of the teacher
 7. ☐ Providing a basis for promotion
 8. ☐ Providing the basis for retention in position
 9. ☐ Determining the inservice needs of the teacher
 10. ☐ Other - Please specify _____
9. Check the primary condition that was involved in initiating the last formal evaluation.
 1. ☐ Parental complaint
 2. ☐ Routine evaluation according to District Policy
 3. ☐ Concerns arising from informal observations
 4. ☐ Teacher request
 5. ☐ Need for documentation
 6. ☐ Other. Please specify _____
10. As a result of the evaluation:
(*Check all that apply*)
 1. ☐ The teacher was/will be recommended for permanent certification
 2. ☐ The teacher was/will be awarded a permanent contract
 3. ☐ The teacher was/will be dismissed
 4. ☐ The teacher was/will be promoted
 5. ☐ The teacher was/will continue in present position
 6. ☐ An in-service plan was/will be developed for the teacher
 7. ☐ The teacher was/will be evaluated by another evaluator
 8. ☐ The teacher challenged the evaluation report
 9. ☐ Other - Please specify _____

SECTION 3

Respond to the following statement in relation to the last formal teacher evaluation you conducted.

1. Yes ☐ No ☐ The teacher had a written job description.
2. Yes ☐ No ☐ Standards of performance had been developed for the teacher.
3. Yes ☐ No ☐ I met with the teacher prior to the observation.
4. Yes ☐ No ☐ I found out what the teacher expected the students to be doing during the visit.
5. Yes ☐ No ☐ I found out what concerns or problems the teacher had.
6. Yes ☐ No ☐ I suggested a variety of observational techniques which could be used during the visit.
7. Yes ☐ No ☐ The teacher had input in determining observational strategies and the type of data to be collected.
8. Yes ☐ No ☐ I recorded impressions about the appearance of the classroom.
9. Yes ☐ No ☐ I made verbatim notes of classroom dialogue.
10. Yes ☐ No ☐ I recorded data on the teacher's questions for later analysis.
11. Yes ☐ No ☐ I recorded data on students' responses to teacher's questions.
12. Yes ☐ No ☐ I recorded data on student on-task behavior.
13. Yes ☐ No ☐ I recorded data on the patterns of students' responses.
14. Yes ☐ No ☐ I made audio recordings of the lesson.
15. Yes ☐ No ☐ I recorded data on teacher movement patterns.
16. Yes ☐ No ☐ I recorded data on student movement patterns.
17. Yes ☐ No ☐ I made video recordings of the lessons.
18. Yes ☐ No ☐ I recorded data on the behavior of a specific student.
19. Yes ☐ No ☐ I recorded subjective data on the quality of student/teacher interaction.
20. Yes ☐ No ☐ I remained in the classroom for at least 30 minutes when I visited.
21. Yes ☐ No ☐ I examined the teachers' planbook.
22. Yes ☐ No ☐ I specifically checked that the program was in accord with the Alberta Program of Studies.
23. Yes ☐ No ☐ I examined the Record of Student Achievement.
24. Yes ☐ No ☐ I examined student work.
25. Yes ☐ No ☐ I met with the teacher after the observations.
26. Yes ☐ No ☐ I solicited the teacher's analysis of the data.
27. Yes ☐ No ☐ I encouraged the teacher to make inferences and to express feelings and opinions about the observational data.
28. Yes ☐ No ☐ I encouraged the teacher to consider alternative teaching techniques and explanations of classroom events.
29. Yes ☐ No ☐ I listened more than I talked during the post observation conference.
30. Yes ☐ No ☐ I gave praise and encouragement for specific growth in the teacher's teaching skills.
31. Yes ☐ No ☐ I recommended resources such as books and training programs which dealt with areas in which the teacher wished to improve.
32. Yes ☐ No ☐ I developed recommendations to assist the teacher improve instruction.
33. Yes ☐ No ☐ I developed recommendations in cooperation with the teacher.
34. Yes ☐ No ☐ I developed a plan of assistance for the teacher as an outcome of the evaluation.
35. Yes ☐ No ☐ I gave the teacher a copy of the evaluation report.
36. Yes ☐ No ☐ The teacher was given the opportunity to respond in writing to the report.
37. Yes ☐ No ☐ The teacher had recourse to a formal appeal procedure if he/she challenged the report.

If you have any comments which would assist the researcher in describing the current state of formal evaluation in Alberta, please use the next page, or attach additional sheets as necessary.

Thank you for your assistance in completing this questionnaire, would you please return it in the self-addressed stamped enveloped provided.
Thank you.

FOR OFFICE USE ONLY:

38 DPY ☐ N ☐
39 ILY ☐ N ☐

A.N. Duncan
Lakeland School District #5460
Postal Bag Service "A"
BONNYVILLE, Alberta T0A 0L0

APPENDIX B

THE MODIFIED ACHESON/SHINN INSTRUMENT

ESSENTIAL (high priority)
DESIRABLE (moderate priority)
ACCEPTABLE (low priority)
NOT ACCEPTABLE

Listed below are thirty seven statements of strategies or activities commonly used by evaluators in the formal evaluation of teachers.
(A formal evaluation includes a written report containing a recommendation or rating.)

By checking the appropriate box, please rate each statement with respect to it's importance in a formal evaluation designed to improve instruction.

1. ☒ 1 ☒ 2 ☒ 3 ☒ 4 The teacher had a written job description.
2. ☒ 1 ☒ 2 ☒ 3 ☒ 4 Standards of performance had been developed for the teacher.
3. ☒ 1 ☒ 2 ☒ 3 ☒ 4 I met with the teacher prior to the observation.
4. ☒ 1 ☒ 2 ☒ 3 ☒ 4 I found out what the teacher expected the students to be doing during the visit.
5. ☒ 1 ☒ 2 ☒ 3 ☒ 4 I found out what concerns or problems the teacher had.
6. ☒ 1 ☒ 2 ☒ 3 ☒ 4 I suggested a variety of observational techniques which could be used during the visit.
7. ☒ 1 ☒ 2 ☒ 3 ☒ 4 The teacher had input in determining observational strategies and the type of data to be collected.
8. ☒ 1 ☒ 2 ☒ 3 ☒ 4 I recorded impressions about the appearance of the classroom.
9. ☒ 1 ☒ 2 ☒ 3 ☒ 4 I made verbatim notes of classroom dialogue.
10. ☒ 1 ☒ 2 ☒ 3 ☒ 4 I recorded data on the teacher's questions for later analysis.
11. ☒ 1 ☒ 2 ☒ 3 ☒ 4 I recorded data on students' responses to teacher's questions.
12. ☒ 1 ☒ 2 ☒ 3 ☒ 4 I recorded data on student on-task behavior.
13. ☒ 1 ☒ 2 ☒ 3 ☒ 4 I recorded data on the patterns of students' responses.
14. ☒ 1 ☒ 2 ☒ 3 ☒ 4 I made audio recordings of the lesson.
15. ☒ 1 ☒ 2 ☒ 3 ☒ 4 I recorded data on teacher movement patterns.
16. ☒ 1 ☒ 2 ☒ 3 ☒ 4 I recorded data on student movement patterns.
17. ☒ 1 ☒ 2 ☒ 3 ☒ 4 I made video recordings of the lessons.
18. ☒ 1 ☒ 2 ☒ 3 ☒ 4 I recorded data on the behavior of a specific student.
19. ☒ 1 ☒ 2 ☒ 3 ☒ 4 I recorded subjective data on the quality of student/teacher interaction.
20. ☒ 1 ☒ 2 ☒ 3 ☒ 4 I remained in the classroom for at least 30 minutes when I visited.
21. ☒ 1 ☒ 2 ☒ 3 ☒ 4 I examined the teachers' planbook.
22. ☒ 1 ☒ 2 ☒ 3 ☒ 4 I specifically checked that the program was in accord with the Alberta Program of Studies.
23. ☒ 1 ☒ 2 ☒ 3 ☒ 4 I examined the Record of Student Achievement.
24. ☒ 1 ☒ 2 ☒ 3 ☒ 4 I examined student work.
25. ☒ 1 ☒ 2 ☒ 3 ☒ 4 I met with the teacher after the observations.
26. ☒ 1 ☒ 2 ☒ 3 ☒ 4 I solicited the teacher's analysis of the data.
27. ☒ 1 ☒ 2 ☒ 3 ☒ 4 I encouraged the teacher to make inferences and to express feelings and opinions about the observational data.
28. ☒ 1 ☒ 2 ☒ 3 ☒ 4 I encouraged the teacher to consider alternative teaching techniques and explanations of classroom events.
29. ☒ 1 ☒ 2 ☒ 3 ☒ 4 I listened more than I talked during the post observation conference.
30. ☒ 1 ☒ 2 ☒ 3 ☒ 4 I gave praise and encouragement for specific growth in the teacher's teaching skills.
31. ☒ 1 ☒ 2 ☒ 3 ☒ 4 I recommended resources such as books and training programs which dealt with areas in which the teacher wished to improve.
32. ☒ 1 ☒ 2 ☒ 3 ☒ 4 I developed recommendations to assist the teacher improve instruction.
33. ☒ 1 ☒ 2 ☒ 3 ☒ 4 I developed recommendations in cooperation with the teacher.
34. ☒ 1 ☒ 2 ☒ 3 ☒ 4 I developed a plan of assistance for the teacher as an outcome of the evaluation.
35. ☒ 1 ☒ 2 ☒ 3 ☒ 4 I gave the teacher a copy of the evaluation report.
36. ☒ 1 ☒ 2 ☒ 3 ☒ 4 The teacher was given the opportunity to respond in writing to the report.
37. ☒ 1 ☒ 2 ☒ 3 ☒ 4 The teacher had recourse to a formal appeal procedure if he/she challenged the report.

ESSENTIAL (high priority)
 DESIRABLE (moderate priority)
 ACCEPTABLE (low priority)
 NOT ACCEPTABLE

Listed below are thirty seven statements of strategies or activities commonly used by evaluators in the formal evaluation of teachers.
 (A formal evaluation includes a written report containing a recommendation or rating.)

By checking the appropriate box, please rate each statement with respect to its importance in a formal evaluation designed to meet DUE PROCESS requirements

1. ☐ 1 ☐ 2 ☐ 3 ☐ 4 The teacher had a written job description.
2. ☐ 1 ☐ 2 ☐ 3 ☐ 4 Standards of performance had been developed for the teacher.
3. ☐ 1 ☐ 2 ☐ 3 ☐ 4 I met with the teacher prior to the observation.
4. ☐ 1 ☐ 2 ☐ 3 ☐ 4 I found out what the teacher expected the students to be doing during the visit.
5. ☐ 1 ☐ 2 ☐ 3 ☐ 4 I found out what concerns or problems the teacher had.
6. ☐ 1 ☐ 2 ☐ 3 ☐ 4 I suggested a variety of observational techniques which could be used during the visit.
7. ☐ 1 ☐ 2 ☐ 3 ☐ 4 The teacher had input in determining observational strategies and the type of data to be collected.
8. ☐ 1 ☐ 2 ☐ 3 ☐ 4 I recorded impressions about the appearance of the classroom.
9. ☐ 1 ☐ 2 ☐ 3 ☐ 4 I made verbatim notes of classroom dialogue.
10. ☐ 1 ☐ 2 ☐ 3 ☐ 4 I recorded data on the teacher's questions for later analysis.
11. ☐ 1 ☐ 2 ☐ 3 ☐ 4 I recorded data on students' responses to teacher's questions.
12. ☐ 1 ☐ 2 ☐ 3 ☐ 4 I recorded data on student on-task behavior.
13. ☐ 1 ☐ 2 ☐ 3 ☐ 4 I recorded data on the patterns of students' responses.
14. ☐ 1 ☐ 2 ☐ 3 ☐ 4 I made audio recordings of the lesson.
15. ☐ 1 ☐ 2 ☐ 3 ☐ 4 I recorded data on teacher movement patterns.
16. ☐ 1 ☐ 2 ☐ 3 ☐ 4 I recorded data on student movement patterns.
17. ☐ 1 ☐ 2 ☐ 3 ☐ 4 I made video recordings of the lessons.
18. ☐ 1 ☐ 2 ☐ 3 ☐ 4 I recorded data on the behavior of a specific student.
19. ☐ 1 ☐ 2 ☐ 3 ☐ 4 I recorded subjective data on the quality of student/teacher interaction.
20. ☐ 1 ☐ 2 ☐ 3 ☐ 4 I remained in the classroom for at least 30 minutes when I visited.
21. ☐ 1 ☐ 2 ☐ 3 ☐ 4 I examined the teachers' planbook.
22. ☐ 1 ☐ 2 ☐ 3 ☐ 4 I specifically checked that the program was in accord with the Alberta Program of Studies.
23. ☐ 1 ☐ 2 ☐ 3 ☐ 4 I examined the Record of Student Achievement.
24. ☐ 1 ☐ 2 ☐ 3 ☐ 4 I examined student work.
25. ☐ 1 ☐ 2 ☐ 3 ☐ 4 I met with the teacher after the observations.
26. ☐ 1 ☐ 2 ☐ 3 ☐ 4 I solicited the teacher's analysis of the data.
27. ☐ 1 ☐ 2 ☐ 3 ☐ 4 I encouraged the teacher to make inferences and to express feelings and opinions about the observational data.
28. ☐ 1 ☐ 2 ☐ 3 ☐ 4 I encouraged the teacher to consider alternative teaching techniques and explanations of classroom events.
29. ☐ 1 ☐ 2 ☐ 3 ☐ 4 I listened more than I talked during the post observation conference.
30. ☐ 1 ☐ 2 ☐ 3 ☐ 4 I gave praise and encouragement for specific growth in the teacher's teaching skills.
31. ☐ 1 ☐ 2 ☐ 3 ☐ 4 I recommended resources such as books and training programs which dealt with areas in which the teacher wished to improve.
32. ☐ 1 ☐ 2 ☐ 3 ☐ 4 I developed recommendations to assist the teacher improve instruction.
33. ☐ 1 ☐ 2 ☐ 3 ☐ 4 I developed recommendations in cooperation with the teacher.
34. ☐ 1 ☐ 2 ☐ 3 ☐ 4 I developed a plan of assistance for the teacher as an outcome of the evaluation.
35. ☐ 1 ☐ 2 ☐ 3 ☐ 4 I gave the teacher a copy of the evaluation report.
36. ☐ 1 ☐ 2 ☐ 3 ☐ 4 The teacher was given the opportunity to respond in writing to the report.
37. ☐ 1 ☐ 2 ☐ 3 ☐ 4 The teacher had recourse to a formal appeal procedure if he/she challenged the report.

APPENDIX C

LETTERS OF TRANSMITTAL

30 April 1984

Dear Colleague,

Teacher evaluation is upon us !

The recent announcement by the Honourable David King of the Provincial Evaluation Policies has far reaching implications for school jurisdictions and educational administrators.

Given the very natural concerns that arise following the publication of such a policy, it is clear that there is a great need to establish "what is" and "what should be" in the domain of teacher evaluation. To this end we are undertaking a study to document the teacher evaluation practices currently used by administrators, the practices preferred by teachers and the practices necessary to meet minimum due process requirements. It is anticipated that the study will generate useful information for the formulation of sound, fair teacher evaluation practices.

As part of this study we are soliciting your assistance and would ask that you complete and return the attached questionnaire - it takes about 10 minutes to complete. A stamped, addressed envelope is provided.

Individual responses will remain anonymous and confidential and a summary of the research will be disseminated in the fall.

Your assistance in replying as soon as possible is appreciated.

Sincerely,

A. N. Duncan. B.Ed., M.Ed., A.C.P.
Teacher Evaluation Research Project.

30 April 1984

Dear Colleague,

RE: Provincial Evaluation Policies - Teacher Evaluation

Before rushing headlong into hastily conceived schemes, there would seem to be a real need to establish "what is" and "what should be" in the domain of teacher evaluation. To this end the Lakeland School District is sponsoring a study to determine:

- (1) Current teacher evaluation practices (including the influence of training and experience on the evaluation strategies)
- (2) evaluation practices preferred by teachers
- (3) practices necessary to meet minimum "due process" and "improvement of instruction" requirements.

We are soliciting your assistance in two ways; firstly in completing and returning the enclosed questionnaire (it takes about 10 minutes) and secondly through your support of the project by encouraging your administrative staff to respond. - The questionnaire was sent to all Superintendents, and all Assistants listed on the 1983 C.A.S.S. membership roster and a sample of 350 principals from around the Province.

Your assistance is appreciated. Thanks.

Sincerely,

A.N. Duncan, Coordinator
Teacher Evaluation Research Project

AND/pr

ENCL.

LAKELAND PUBLIC SCHOOL DISTRICT NO. 5460



DEPUTY SUPERINTENDENT
MR W HAYDUK

POSTAL BAG SERVICE A
BONNYVILLE, ALBERTA T0A 0L0
PHONE: (403) 826-3145

14 May 1984

Dr. R. Heyman, Professor
Dept. of Educational Policy & Admin. Studies
The University of Calgary
2500 University Drive N.W.
CALGARY, Alberta
T2N 1N4

Dear Dr. Heyman,

We are conducting a study into the practices used by administrators in the formal evaluation of teachers and, as a component of that research, are soliciting the assistance of acknowledged experts in delineating essential evaluation strategies.

You were identified by Dr. Oliva, Associate Dean, Faculty of Education, as a person with particular expertise in teacher evaluation and we would be most grateful if you assist us by completing and returning the attached questionnaire - it should take less than ten minutes. A self addressed, reply paid envelope is enclosed.

Your assistance is appreciated.

Thank you.

Sincerely,

A.N. Duncan
Teacher Evaluation Research Project

AND/pr

Attachment

LAKELAND PUBLIC SCHOOL DISTRICT NO. 5460



DEPUTY SUPERINTENDENT
MR. W. HAYDUK

POSTAL BAG SERVICE A
BONNYVILLE, ALBERTA T0A 0L0
PHONE: (403) 826-3145

23 May 1984

Mr. Richard McNally
A.S.T.A.
12310 - 105 Avenue
EDMONTON, Alberta
T5N 0Y4

Dear Mr. McNally,

We are conducting research into the teacher evaluation practices currently in use in Alberta and are soliciting your assistance because of your acknowledged expertise in the domain of Due Process in teacher evaluation.

The attached questionnaire lists thirty eight evaluator activities which are commonly practiced. You are asked to rate each of these activities with respect to Due Process requirements. This will enable us to identify the relative importance of each component of the evaluation procedure should an evaluation ever be challenged in the courts or before a Board of Reference. Your assistance in completing and returning the questionnaire would be greatly appreciated.

Should you have any questions regarding this research please do not hesitate to call me (collect) at 826-3145. Thank you.

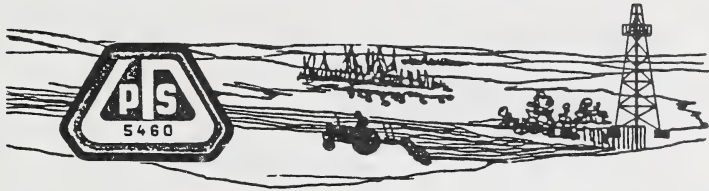
Sincerely,

A.N. Duncan B.Ed., M.Ed., A.C.P.
Teacher Evaluation Research Project

AND/pr

Attachment

LAKELAND PUBLIC SCHOOL DISTRICT NO. 5460



SECRETARY - TREASURER
MR. C.B. GAULT

POSTAL BAG SERVICE A
BONNYVILLE, ALBERTA T0A 0L0
PHONE: (403) 826-3145

May 20, 1984

Dear Colleague,

WE NEED YOUR HELP!

With the pressures that administrators face at this time of year and the number of da__ed! *@! questionnaires that cross one's desk, it is probable that you have not had a chance to get to the survey we sent to you three weeks ago, however, we need YOUR help.

In researching "what is" and "what should be" in the domain of teachers evaluation, we are attempting to provide meaningful data for the formulation of sound policy and regulations, and to provide a baseline for assessing the impact of the new Provincial Evaluation Policies. We cannot do this without your help.

Whether or not you have conducted any teacher evaluations, won't you please take a few minutes now to complete and return the enclosed questionnaire. A reply paid envelope is provided.

The results of the study will be disseminated in the fall.

Thanks for you assistance.

Sincerely,

A.N. Duncan
Teacher Evaluation Research Project
ph. 826-3145 (Bus.)
826-6422 (Res.)

LAKELAND SCHOOL DISTRICT # 5460
Postal Bag Service A
Bonnyville, Alberta.
TOA OLO

18 June 1984

Dear Colleague,

In any research project, the quality or value of the study is dramatically affected by the response rate. It is our hope that we can maximize the value of our study on Teacher Evaluation by achieving as high a response rate as possible from the teachers surveyed.

As of today we have not received a reply from you on the survey we mailed last month, and are writing to ask if you would take a few minutes to complete the attached questionnaire and return it in the enclosed prepaid envelope. We NEED your response to make our research meaningful - PLEASE complete and return the questionnaire.

The study has the support of the Planning and Research Branch of Alberta Education. The findings will be disseminated in the fall.

PLEASE RETURN THE QUESTIONNAIRE - THANKS

Sincerely,

Andy Duncan
Teacher Evaluation Research Project
ph. 826 3145 (bus)
826 6422 (res)

LAKELAND SCHOOL DISTRICT # 5460
Postal Bag Service A
Bonnyville, Alberta.
TOA OLO

18 June 1984

Dear Mr.

In any research project, the quality or value of the study is dramatically affected by the response rate. It is our hope that we can maximize the value of our study on Teacher Evaluation by achieving as high a response rate as possible.

As of today we have not received a reply from you on the survey we mailed last month, and are writing to ask if you would take a few minutes to complete the attached questionnaire and return it in the enclosed prepaid envelope. Even if you have not evaluated any teachers this year, or if you are the principal of a one or two room school, we NEED your response - PLEASE complete and return the questionnaire.

The study has the support of the Planning and Research Branch of Alberta Education and of the Conference of Alberta School Superintendents. The findings will be disseminated in the fall.

PLEASE RETURN THE QUESTIONNAIRE - THANKS

Sincerely,

Andy Duncan
Teacher Evaluation Research Project
ph. 826 3145 (bus)
826 6422 (res)

APPENDIX D

STATISTICAL DATA

Key

SUM37 - Score (Number of "yes" responses) on Section 3 of the questionnaire--The Modified Acheson/Shinn Instrument.

PROCESS - Score on the "due process" subset of the Acheson/Shinn items.

IMPRVT - Score on the "Improvement of Instruction" subset.

TEACH - Score on the "Teacher Perception" subset.

Q1 - Section 1 of the questionnaire.

QI - Section 2 of the questionnaire.

QIII - Section 3 of the questionnaire.

Thus QII 8.1 refers to question # 8, part 1, on Section 2 of the questionnaire.

Value labels:

0 - "No" response

1 - "Yes" response

OR: relate to the item bearing that number on the questionnaire. (Q19 and the Multiple Classification Analyses).

CRITERION VARIABLE SUM37
BROKEN DOWN BY QII8 1

ANALYSIS OF VARIANCE						
VALUE	LABEL	SUM	MEAN	STD DEV	SUM OF SQ	CASES
0		7336.0000	24.3721	4.9961	7488.3256	301
1		1006.0000	21.8696	5.1923	1213.2174	46
WITHIN GROUPS TOTAL		8342.0000	24.0403	5.0221	8701.5430	347

ANALYSIS OF VARIANCE					
SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F	SIG.
BETWEEN GROUPS	249.8922	1	249.8922	9.9078	.0018
WITHIN GROUPS	8701.5430	345	25.2219		
ETA = .1671 ETA SQUARED = .0279					

CRITERION VARIABLE SUM37
BROKEN DOWN BY QII8 2

ANALYSIS OF VARIANCE						
VALUE	LABEL	SUM	MEAN	STD DEV	SUM OF SQ	CASES
0		6404.0000	23.8955	5.2763	7433.0746	268
1		1938.0000	24.5316	4.3760	1493.6709	79
WITHIN GROUPS TOTAL		8342.0000	24.0403	5.0867	8926.7455	347

ANALYSIS OF VARIANCE					
SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F	SIG.
BETWEEN GROUPS	24.6896	1	24.6896	.9542	.3293
WITHIN GROUPS	8926.7455	345	25.8746		
ETA = .0525 ETA SQUARED = .0028					

CRITERION VARIABLE SUM37
BROKEN DOWN BY Q118.3

ANALYSIS OF VARIANCE					
VALUE	LABEL	SUM	MEAN	STD DEV	CASES
0		7910.0000	23.9697	5.1132	330
1		432.0000	25.4118	4.4449	17
WITHIN GROUPS TOTAL		8342.0000	24.0403	5.0842	347

ANALYSIS OF VARIANCE					
SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F	SIG.
BETWEEN GROUPS	33.6205	1	33.6205	1.3007	.2549
WITHIN GROUPS	8917.8146	345	25.8487		
ETA = .0613 ETA SQUARED = .0038					

CRITERION VARIABLE SUM37
BROKEN DOWN BY Q118.4

ANALYSIS OF VARIANCE					
VALUE	LABEL	SUM	MEAN	STD DEV	CASES
0		8147.0000	23.9618	5.0905	340
1		195.0000	27.8571	3.2367	7
WITHIN GROUPS TOTAL		8342.0000	24.0403	5.0640	347

ANALYSIS OF VARIANCE					
SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F	SIG.
BETWEEN GROUPS	104.0751	1	104.0751	4.0584	.0447
WITHIN GROUPS	8847.3601	345	25.6445		
ETA = .1078 ETA SQUARED = .0116					

CRITERION VARIABLE SUM37
BROKEN DOWN BY Q118.5

ANALYSIS OF VARIANCE						
VALUE	LABEL	SUM	MEAN	STD DEV	SUM OF SQ	CASES
0		8078.0000	23.9703	5.1024	8747.7033	337
1		264.0000	26.4000	4.0332	146.4000	10
WITHIN GROUPS TOTAL		8342.0000	24.0403	5.0774	8894.1033	347

ANALYSIS OF VARIANCE					
SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F	SIG.
BETWEEN GROUPS	57.3319	1	57.3319	2.2239	.1368
WITHIN GROUPS	8894.1033	345	25.7800		
ETA = .0800		ETA SQUARED = .0064			

CRITERION VARIABLE SUM37
BROKEN DOWN BY Q118.6

ANALYSIS OF VARIANCE						
VALUE	LABEL	SUM	MEAN	STD DEV	SUM OF SQ	CASES
0		5339.0000	23.3144	5.1612	6073.3624	229
1		3003.0000	25.4492	4.6439	2523.1949	118
WITHIN GROUPS TOTAL		8342.0000	24.0403	4.9917	8596.5574	347

ANALYSIS OF VARIANCE					
SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F	SIG.
BETWEEN GROUPS	354.8778	1	354.8778	14.2421	.0002
WITHIN GROUPS	8596.5574	345	24.9176		
ETA = .1991		ETA SQUARED = .0396			

CRITERION VARIABLE SUM37
BROKEN DOWN BY Q118.7

ANALYSIS OF VARIANCE						
VALUE	LABEL	SUM	MEAN	STD DEV	SUM OF SQ	CASES
0		8193.0000	24.0264	5.0657	8724.7625	341
1		149.0000	24.8333	6.6758	222.8333	6
WITHIN GROUPS TOTAL		8342.0000	24.0403	5.0926	8947.5958	347

ANALYSIS OF VARIANCE					
SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F	SIG.
BETWEEN GROUPS	3.8394	1	3.8394	.1480	.7007
WITHIN GROUPS	8947.5958	345	25.9351		
ETA = .0207 ETA SQUARED = .0004					

CRITERION VARIABLE SUM37
BROKEN DOWN BY Q118.8

ANALYSIS OF VARIANCE						
VALUE	LABEL	SUM	MEAN	STD DEV	SUM OF SQ	CASES
0		6819.0000	24.0106	5.2523	7806.9683	284
1		1523.0000	24.1746	4.2938	1143.0794	63
WITHIN GROUPS TOTAL		8342.0000	24.0403	5.0933	8950.0477	347

ANALYSIS OF VARIANCE					
SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F	SIG.
BETWEEN GROUPS	1.3875	1	1.3875	.0535	.8172
WITHIN GROUPS	8950.0477	345	25.9422		
ETA = .0124 ETA SQUARED = .0002					

CRITERION VARIABLE SUM37
BROKEN DOWN BY QII8.9

ANALYSIS OF VARIANCE						
VALUE	LABEL	SUM	MEAN	STD DEV	SUM OF SQ	CASES
0		7623.0000	23.9717	5.0282	8014.7453	318
1		719.0000	24.7931	5.7282	918.7586	29
WITHIN GROUPS TOTAL		8342.0000	24.0403	5.0886	8933.5039	347

ANALYSIS OF VARIANCE					
SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F	SIG.
BETWEEN GROUPS	17.9313	1	17.9313	.6925	.4059
WITHIN GROUPS	8933.5039	345	25.8942		
ETA = .0448 ETA SQUARED = .0020					

CRITERION VARIABLE SUM37
BROKEN DOWN BY QII8.10

ANALYSIS OF VARIANCE						
VALUE	LABEL	SUM	MEAN	STD DEV	SUM OF SQ	CASES
0		7123.0000	24.2279	5.1116	7655.7313	294
1		1219.0000	23.0000	4.8596	1228.0000	53
WITHIN GROUPS TOTAL		8342.0000	24.0403	5.0744	8883.7313	347

ANALYSIS OF VARIANCE					
SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F	SIG.
BETWEEN GROUPS	67.7039	1	67.7039	2.6293	.1058
WITHIN GROUPS	8883.7313	345	25.7499		
ETA = .0870 ETA SQUARED = .0076					

CRITERION VARIABLE SUM37
BROKEN DOWN BY Q119 1

ANALYSIS OF VARIANCE						
VALUE	LABEL	SUM	MEAN	STD DEV	SUM OF SQ	CASES
0		7844.0000	23.9878	5.0616	8351.9511	327
1		498.0000	24.9000	5.5431	583.8000	20
WITHIN GROUPS TOTAL		8342.0000	24.0403	5.0893	8935.7511	347

ANALYSIS OF VARIANCE					
SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F	SIG.
BETWEEN GROUPS	15.6841	1	15.6841	.6055	.4370
WITHIN GROUPS	8935.7511	345	25.9007		
ETA = .0419 ETA SQUARED = .0018					

CRITERION VARIABLE SUM37
BROKEN DOWN BY Q119 2

ANALYSIS OF VARIANCE						
VALUE	LABEL	SUM	MEAN	STD DEV	SUM OF SQ	CASES
0		2315.0000	23.1500	5.8558	3394.7500	100
1		6027.0000	24.4008	4.7048	5445.3198	247
WITHIN GROUPS TOTAL		8342.0000	24.0403	5.0620	8840.0698	347

ANALYSIS OF VARIANCE					
SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F	SIG.
BETWEEN GROUPS	111.3653	1	111.3653	4.3462	.0378
WITHIN GROUPS	8840.0698	345	25.6234		
ETA = .1115 ETA SQUARED = .0124					

CRITERION VARIABLE SUM37
BROKEN DOWN BY Q119.3

ANALYSIS OF VARIANCE					
VALUE	LABEL	SUM	MEAN	STD DEV	CASES
0		7700.0000	23.9130	5.0860	322
1		642.0000	25.6800	4.8966	25
WITHIN GROUPS TOTAL		8342.0000	24.0403	5.0731	347

ANALYSIS OF VARIANCE					
SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F	SIG.
BETWEEN GROUPS	72.4299	1	72.4299	2.8143	.0943
WITHIN GROUPS	8879.0052	345	25.7362		
ETA = .0900 ETA SQUARED = .0081					

CRITERION VARIABLE SUM37
BROKEN DOWN BY Q119.4

ANALYSIS OF VARIANCE					
VALUE	LABEL	SUM	MEAN	STD DEV	CASES
0		7637.0000	24.0157	5.0314	318
1		705.0000	24.3103	5.7452	29
WITHIN GROUPS TOTAL		8342.0000	24.0403	5.0931	347

ANALYSIS OF VARIANCE					
SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F	SIG.
BETWEEN GROUPS	2.3069	1	2.3069	.0889	.7657
WITHIN GROUPS	8949.1283	345	25.9395		
ETA = .0161 ETA SQUARED = .0003					

CRITERION VARIABLE SUM37
BROKEN DOWN BY Q119.5

ANALYSIS OF VARIANCE						
VALUE	LABEL	SUM	MEAN	STD DEV	SUM OF SQ	CASES
0		7178.0000	24.2500	5.1917	7951.5000	296
1		1164.0000	22.8235	4.2695	911.4118	51
WITHIN GROUPS TOTAL		8342.0000	24.0403	5.0685	8862.9118	347

ANALYSIS OF VARIANCE					
SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F	SIG.
BETWEEN GROUPS	88.5234	1	88.5234	3.4459	.0643
WITHIN GROUPS	8862.9118	345	25.6896		
ETA = .0994 ETA SQUARED = .0099					

CRITERION VARIABLE SUM37
BROKEN DOWN BY Q119.6

ANALYSIS OF VARIANCE						
VALUE	LABEL	SUM	MEAN	STD DEV	SUM OF SQ	CASES
0		7949.0000	24.0879	5.1099	8590.4515	330
1		393.0000	23.1176	4.6487	345.7647	17
WITHIN GROUPS TOTAL		8342.0000	24.0403	5.0894	8936.2162	347

ANALYSIS OF VARIANCE					
SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F	SIG.
BETWEEN GROUPS	15.2189	1	15.2189	.5876	.4439
WITHIN GROUPS	8936.2162	345	25.9021		
ETA = .0412 ETA SQUARED = .0017					

CRITERION VARIABLE SUM37
BROKEN DOWN BY Q1110.1

ANALYSIS OF VARIANCE						
VALUE	LABEL	SUM	MEAN	STD DEV	SUM OF SQ	CASES
0		7203.0000	24.4169	4.9938	7331.7153	295
1		1139.0000	21.9038	5.1269	1340.5192	52
WITHIN GROUPS TOTAL		8342.0000	24.0403	5.0137	8672.2345	347

ANALYSIS OF VARIANCE					
SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F	SIG.
BETWEEN GROUPS	279.2007	1	279.2007	11.1072	.0010
WITHIN GROUPS	8672.2345	345	25.1369		
ETA = .1766 ETA SQUARED = .0312					

CRITERION VARIABLE SUM37
BROKEN DOWN BY Q1110.2

ANALYSIS OF VARIANCE						
VALUE	LABEL	SUM	MEAN	STD DEV	SUM OF SQ	CASES
0		6733.0000	23.9609	5.1722	7490.5694	281
1		1609.0000	24.3788	4.7256	1451.5303	66
WITHIN GROUPS TOTAL		8342.0000	24.0403	5.0911	8942.0997	347

ANALYSIS OF VARIANCE					
SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F	SIG.
BETWEEN GROUPS	9.3355	1	9.3355	.3602	.5488
WITHIN GROUPS	8942.0997	345	25.9191		
ETA = .0323 ETA SQUARED = .0010					

CRITERION VARIABLE SUM37
BROKEN DOWN BY Q1110.3

ANALYSIS OF VARIANCE						
VALUE	LABEL	SUM	MEAN	STD DEV	SUM OF SQ	CASES
0		7818.0000	23.9816	5.1231	8529.8896	326
1		524.0000	24.9524	4.4886	402.9524	21
WITHIN GROUPS TOTAL		8342.0000	24.0403	5.0884	8932.8420	347

ANALYSIS OF VARIANCE					
SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F	SIG.
BETWEEN GROUPS	18.5932	1	18.5932	.7181	.3974
WITHIN GROUPS	8932.8420	345	25.8923		
ETA = .0456 ETA SQUARED = .0021					

CRITERION VARIABLE SUM37
BROKEN DOWN BY Q1110.4

ANALYSIS OF VARIANCE						
VALUE	LABEL	SUM	MEAN	STD DEV	SUM OF SQ	CASES
0		8158.0000	23.9941	5.0758	8733.9882	340
1		184.0000	26.2857	5.4989	181.4286	7
WITHIN GROUPS TOTAL		8342.0000	24.0403	5.0835	8915.4168	347

ANALYSIS OF VARIANCE					
SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F	SIG.
BETWEEN GROUPS	36.0184	1	36.0184	1.3938	.2386
WITHIN GROUPS	8915.4168	345	25.8418		
ETA = .0634 ETA SQUARED = .0040					

CRITERION VARIABLE SUM37
BROKEN DOWN BY Q1110 5

ANALYSIS OF VARIANCE					
VALUE	LABEL	SUM	MEAN	STD DEV	CASES
0		3969.0000	24.2012	5.5740	164
1		4373.0000	23.8962	4.6166	183
WITHIN GROUPS TOTAL		8342.0000	24.0403	5.0914	347

ANALYSIS OF VARIANCE					
SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F	SIG.
BETWEEN GROUPS	8.0481	1	8.0481	.3105	.5778
WITHIN GROUPS	8943.3871	345	25.9229		
ETA = .0300 ETA SQUARED = .0009					

CRITERION VARIABLE SUM37
BROKEN DOWN BY Q1110.6

ANALYSIS OF VARIANCE					
VALUE	LABEL	SUM	MEAN	STD DEV	CASES
0		7142.0000	23.5710	5.0652	303
1		1200.0000	27.2727	3.9671	44
WITHIN GROUPS TOTAL		8342.0000	24.0403	4.9417	347

ANALYSIS OF VARIANCE					
SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F	SIG.
BETWEEN GROUPS	526.4835	1	526.4835	21.5594	.0000
WITHIN GROUPS	8424.9517	345	24.4201		
ETA = .2425 ETA SQUARED = .0588					

CRITERION VARIABLE SUM37
BROKEN DOWN BY Q1110.7

ANALYSIS OF VARIANCE						
VALUE	LABEL	SUM	MEAN	STD DEV	SUM OF SQ	CASES
0		7846.0000	23.9939	5.1344	8593.9878	327
1		496.0000	24.8000	4.2624	345.2000	20
WITHIN GROUPS TOTAL		8342.0000	24.0403	5.0903	8939.1878	347

ANALYSIS OF VARIANCE					
SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F	SIG.
BETWEEN GROUPS	12.2474	1	12.2474	.4727	.4922
WITHIN GROUPS	8939.1878	345	25.9107		
ETA = .0370 ETA SQUARED = .0014					

CRITERION VARIABLE SUM37
BROKEN DOWN BY Q1110.8

ANALYSIS OF VARIANCE						
VALUE	LABEL	SUM	MEAN	STD DEV	SUM OF SQ	CASES
0		8257.0000	24.0029	5.0890	8882.9971	344
1		85.0000	28.3333	2.5166	12.6667	3
WITHIN GROUPS TOTAL		8342.0000	24.0403	5.0778	8895.6638	347

ANALYSIS OF VARIANCE					
SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F	SIG.
BETWEEN GROUPS	55.7714	1	55.7714	2.1630	.1423
WITHIN GROUPS	8895.6638	345	25.7845		
ETA = .0789 ETA SQUARED = .0062					

CRITERION VARIABLE SUM37
BROKEN DOWN BY Q1110.9

ANALYSIS OF VARIANCE						
VALUE	LABEL	SUM	MEAN	STD DEV	SUM OF SQ	CASES
0		7363.0000	23.9837	5.0846	7910.9186	307
1		979.0000	24.4750	5.1440	1031.9750	40
WITHIN GROUPS TOTAL		8342.0000	24.0403	5.0913	8942.8936	347

ANALYSIS OF VARIANCE					
SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F	SIG.
BETWEEN GROUPS	8.5416	1	8.5416	.3295	.5663
WITHIN GROUPS	8942.8936	345	25.9214		
ETA = .0309 ETA SQUARED = .0010					

CRITERION VARIABLE SUM37
BROKEN DOWN BY Q1111

ANALYSIS OF VARIANCE						
VALUE	LABEL	SUM	MEAN	STD DEV	SUM OF SQ	CASES
0		4553.0000	22.8794	5.2287	5413.1055	199
1		3789.0000	25.6014	4.4489	2909.4797	148
WITHIN GROUPS TOTAL		8342.0000	24.0403	4.9116	8322.5853	347

ANALYSIS OF VARIANCE					
SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F	SIG.
BETWEEN GROUPS	628.8499	1	628.8499	26.0680	.0000
WITHIN GROUPS	8322.5853	345	24.1234		
ETA = .2650 ETA SQUARED = .0703					

CRITERION VARIABLE SUM37
BROKEN DOWN BY Q1112

ANALYSIS OF VARIANCE						
VALUE	LABEL	SUM	MEAN	STD DEV	SUM OF SQ	CASES
0		3144.0000	22.1408	5.4922	4253.1031	142
1		5198.0000	25.3561	4.3335	3831.0049	205
WITHIN GROUPS TOTAL		8342.0000	24.0403	4.8407	8084.1880	347

ANALYSIS OF VARIANCE					
SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F	SIG.
BETWEEN GROUPS	867.2472	1	867.2472	37.0106	.0000
WITHIN GROUPS	8084.1880	345	23.4324		
ETA = .3113 ETA SQUARED = .0969					

CRITERION VARIABLE SUM37
BROKEN DOWN BY Q1113

ANALYSIS OF VARIANCE						
VALUE	LABEL	SUM	MEAN	STD DEV	SUM OF SQ	CASES
0		1655.0000	20.9494	5.9397	2751.7975	79
1		6687.0000	24.9515	4.4226	5222.3694	268
WITHIN GROUPS TOTAL		8342.0000	24.0403	4.8077	7974.1669	347

ANALYSIS OF VARIANCE					
SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F	SIG.
BETWEEN GROUPS	977.2683	1	977.2683	42.2812	.0000
WITHIN GROUPS	7974.1669	345	23.1135		
ETA = .3304 ETA SQUARED = .1092					

CRITERION VARIABLE SUM37
BROKEN DOWN BY QIII4

ANALYSIS OF VARIANCE					
VALUE	LABEL	SUM	MEAN	STD DEV	CASES
0		1321.0000	21.3065	6.6937	62
1		7021.0000	24.6351	4.4619	285
WITHIN GROUPS TOTAL		8342.0000	24.0403	4.9306	347

ANALYSIS OF VARIANCE					
SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F	SIG.
BETWEEN GROUPS	564.2086	1	564.2086	23.2081	.0000
WITHIN GROUPS	8387.2265	345	24.3108		
ETA = .2511 ETA SQUARED = .0630					

CRITERION VARIABLE SUM37
BROKEN DOWN BY QIII5

ANALYSIS OF VARIANCE					
VALUE	LABEL	SUM	MEAN	STD DEV	CASES
0		1039.0000	20.3725	6.4186	51
1		7303.0000	24.6723	4.5425	296
WITHIN GROUPS TOTAL		8342.0000	24.0403	4.8595	347

ANALYSIS OF VARIANCE					
SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F	SIG.
BETWEEN GROUPS	804.3008	1	804.3008	34.0591	.0000
WITHIN GROUPS	8147.1344	345	23.6149		
ETA = .2998 ETA SQUARED = .0899					

CRITERION VARIABLE SUM37
BROKEN DOWN BY Q1116

ANALYSIS OF VARIANCE						
VALUE	LABEL	SUM	MEAN	STD DEV	SUM OF SQ	CASES
0		5168.0000	22.4696	4.9147	5531.2870	230
1		3174.0000	27.1282	3.8697	1737.0769	117
WITHIN GROUPS TOTAL		8342.0000	24.0403	4.5900	7268.3639	347

ANALYSIS OF VARIANCE					
SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F	SIG.
BETWEEN GROUPS	1683.0713	1	1683.0713	79.8886	.0000
WITHIN GROUPS	7268.3639	345	21.0677		
ETA = .4336 ETA SQUARED = .1880					

CRITERION VARIABLE SUM37
BROKEN DOWN BY Q1117

ANALYSIS OF VARIANCE						
VALUE	LABEL	SUM	MEAN	STD DEV	SUM OF SQ	CASES
0		5082.0000	22.5867	5.0465	5704.5600	225
1		3260.0000	26.7213	3.9569	1894.5246	122
WITHIN GROUPS TOTAL		8342.0000	24.0403	4.6932	7599.0846	347

ANALYSIS OF VARIANCE					
SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F	SIG.
BETWEEN GROUPS	1352.3506	1	1352.3506	61.3970	.0000
WITHIN GROUPS	7599.0846	345	22.0263		
ETA = .3887 ETA SQUARED = .1511					

CRITERION VARIABLE SUM37
BROKEN DOWN BY Q1118

ANALYSIS OF VARIANCE						
VALUE	LABEL	SUM	MEAN	STD DEV	SUM OF SQ	CASES
0		812.0000	20.8205	7.1667	1951.7436	39
1		7530.0000	24.4481	4.6170	6544.1688	308
WITHIN GROUPS TOTAL		8342.0000	24.0403	4.9624	8495.9124	347

ANALYSIS OF VARIANCE					
SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F	SIG.
BETWEEN GROUPS	455.5227	1	455.5227	18.4978	.0000
WITHIN GROUPS	8495.9124	345	24.6258		
ETA = .2256 ETA SQUARED = .0509					

CRITERION VARIABLE SUM37
BROKEN DOWN BY Q1119

ANALYSIS OF VARIANCE						
VALUE	LABEL	SUM	MEAN	STD DEV	SUM OF SQ	CASES
0		3309.0000	22.0600	5.3360	4242.4600	150
1		5033.0000	25.5482	4.3288	3672.7919	197
WITHIN GROUPS TOTAL		8342.0000	24.0403	4.7899	7915.2519	347

ANALYSIS OF VARIANCE					
SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F	SIG.
BETWEEN GROUPS	1036.1833	1	1036.1833	45.1638	.0000
WITHIN GROUPS	7915.2519	345	22.9428		
ETA = .3402 ETA SQUARED = .1158					

CRITERION VARIABLE SUM37
BROKEN DOWN BY QIIII0

A N A L Y S I S O F V A R I A N C E					
VALUE	LABEL	SUM	MEAN	STD DEV	CASES
0		2467.0000	20.7311	4.8933	119
1		5875.0000	25.7675	4.2720	228
WITHIN GROUPS TOTAL		8342.0000	24.0403	4.4941	347

A N A L Y S I S O F V A R I A N C E					
SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F	SIG.
BETWEEN GROUPS	1983.3604	1	1983.3604	98.1992	.0000
WITHIN GROUPS	6968.0748	345	20.1973		
ETA = .4707 ETA SQUARED = .2216					

CRITERION VARIABLE SUM37
BROKEN DOWN BY QIIII1

A N A L Y S I S O F V A R I A N C E					
VALUE	LABEL	SUM	MEAN	STD DEV	CASES
0		2369.0000	20.9646	4.8861	113
1		5973.0000	25.5256	4.4876	234
WITHIN GROUPS TOTAL		8342.0000	24.0403	4.6207	347

A N A L Y S I S O F V A R I A N C E					
SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F	SIG.
BETWEEN GROUPS	1585.2306	1	1585.2306	74.2451	.0000
WITHIN GROUPS	7366.2046	345	21.3513		
ETA = .4208 ETA SQUARED = .1771					

CRITERION VARIABLE SUM37
BROKEN DOWN BY QIII12

ANALYSIS OF VARIANCE						
VALUE	LABEL	SUM	MEAN	STD DEV	SUM OF SQ	CASES
0		888.0000	19.7333	6.2719	1730.8000	45
1		7454.0000	24.6821	4.5610	6261.4834	302
WITHIN GROUPS TOTAL		8342.0000	24.0403	4.8131	7992.2834	347

ANALYSIS OF VARIANCE					
SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F	SIG.
BETWEEN GROUPS	959.1517	1	959.1517	41.4034	.0000
WITHIN GROUPS	7992.2834	345	23.1660		
ETA = .3273 ETA SQUARED = .1072					

CRITERION VARIABLE SUM37
BROKEN DOWN BY QIII13

ANALYSIS OF VARIANCE						
VALUE	LABEL	SUM	MEAN	STD DEV	SUM OF SQ	CASES
0		3645.0000	21.6964	4.9011	4011.5179	168
1		4697.0000	26.2402	4.2072	3150.6704	179
WITHIN GROUPS TOTAL		8342.0000	24.0403	4.5563	7162.1882	347

ANALYSIS OF VARIANCE					
SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F	SIG.
BETWEEN GROUPS	1789.2469	1	1789.2469	86.1874	.0000
WITHIN GROUPS	7162.1882	345	20.7600		
ETA = .4471 ETA SQUARED = .1999					

CRITERION VARIABLE SUM37
BROKEN DOWN BY Q11114

ANALYSIS OF VARIANCE						
VALUE	LABEL	SUM	MEAN	STD DEV	SUM OF SQ	CASES
0		8182.0000	23.9941	5.0927	8817.9883	341
1		160.0000	26.6667	4.2740	91.3333	6
WITHIN GROUPS TOTAL		8342.0000	24.0403	5.0817	8909.3216	347

ANALYSIS OF VARIANCE					
SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F	SIG.
BETWEEN GROUPS	42.1136	1	42.1136	1.6308	.2025
WITHIN GROUPS	8909.3216	345	25.8241		
ETA = .0686 ETA SQUARED = .0047					

CRITERION VARIABLE SUM37
BROKEN DOWN BY Q11115

ANALYSIS OF VARIANCE						
VALUE	LABEL	SUM	MEAN	STD DEV	SUM OF SQ	CASES
0		4041.0000	21.7258	4.7812	4229.0161	186
1		4301.0000	26.7143	4.0116	2574.8571	161
WITHIN GROUPS TOTAL		8342.0000	24.0403	4.4409	6803.8733	347

ANALYSIS OF VARIANCE					
SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F	SIG.
BETWEEN GROUPS	2147.5619	1	2147.5619	108.8952	.0000
WITHIN GROUPS	6803.8733	345	19.7214		
ETA = .4898 ETA SQUARED = .2399					

CRITERION VARIABLE SUM37
BROKEN DOWN BY Q11116

ANALYSIS OF VARIANCE						
VALUE	LABEL	SUM	MEAN	STD DEV	SUM OF SQ	CASES
0		4190.0000	22.1693	4.9274	4564.5820	189
1		4152.0000	26.2785	4.3228	2933.7468	158
WITHIN GROUPS TOTAL		8342.0000	24.0403	4.6620	7498.3288	347

ANALYSIS OF VARIANCE					
SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F	SIG.
BETWEEN GROUPS	1453.1063	1	1453.1063	66.8578	.0000
WITHIN GROUPS	7498.3288	345	21.7343		
ETA = .4029 ETA SQUARED = .1623					

CRITERION VARIABLE SUM37
BROKEN DOWN BY Q11117

ANALYSIS OF VARIANCE						
VALUE	LABEL	SUM	MEAN	STD DEV	SUM OF SQ	CASES
0		8310.0000	24.0173	5.0756	8887.8960	346
1		32.0000	32.0000	.0000	.0000	1
WITHIN GROUPS TOTAL		8342.0000	24.0403	5.0756	8887.8960	347

ANALYSIS OF VARIANCE					
SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F	SIG.
BETWEEN GROUPS	63.5392	1	63.5392	2.4664	.1172
WITHIN GROUPS	8887.8960	345	25.7620		
ETA = .0843 ETA SQUARED = .0071					

CRITERION VARIABLE SUM37
BROKEN DOWN BY QIII18

ANALYSIS OF VARIANCE						
VALUE	LABEL	SUM	MEAN	STD DEV	SUM OF SQ	CASES
0		3356.0000	22.5497	5.3028	4780.3275	171
1		4486.0000	25.4886	4.4220	3421.9773	176
WITHIN GROUPS TOTAL		8342.0000	24.0403	4.8759	8202.3048	347

ANALYSIS OF VARIANCE					
SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F	SIG.
BETWEEN GROUPS	749.1304	1	749.1304	31.5094	.0000
WITHIN GROUPS	8202.3048	345	23.7748		
ETA = .2893 ETA SQUARED = .0837					

CRITERION VARIABLE SUM37
BROKEN DOWN BY QIII19

ANALYSIS OF VARIANCE						
VALUE	LABEL	SUM	MEAN	STD DEV	SUM OF SQ	CASES
0		733.0000	19.8108	7.1680	1849.6757	37
1		7609.0000	24.5452	4.5371	6360.8677	310
WITHIN GROUPS TOTAL		8342.0000	24.0403	4.8784	8210.5434	347

ANALYSIS OF VARIANCE					
SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F	SIG.
BETWEEN GROUPS	740.8917	1	740.8917	31.1316	.0000
WITHIN GROUPS	8210.5434	345	23.7987		
ETA = .2877 ETA SQUARED = .0828					

CRITERION VARIABLE SUM37
BROKEN DOWN BY QIII20

ANALYSIS OF VARIANCE						
VALUE	LABEL	SUM	MEAN	STD DEV	SUM OF SQ	CASES
0		296.0000	18.5000	8.3825	1054.0000	16
1		8046.0000	24.3082	4.7298	7382.5680	331
WITHIN GROUPS TOTAL		8342.0000	24.0403	4.9451	8436.5680	347

ANALYSIS OF VARIANCE					
SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F	SIG.
BETWEEN GROUPS	514.8672	1	514.8672	21.0547	.0000
WITHIN GROUPS	8436.5680	345	24.4538		
ETA = .2398 ETA SQUARED = .0575					

CRITERION VARIABLE SUM37
BROKEN DOWN BY QIII21

ANALYSIS OF VARIANCE						
VALUE	LABEL	SUM	MEAN	STD DEV	SUM OF SQ	CASES
0		1322.0000	20.9841	6.0335	2256.9841	63
1		7020.0000	24.7183	4.5951	5975.4648	284
WITHIN GROUPS TOTAL		8342.0000	24.0403	4.8849	8232.4489	347

ANALYSIS OF VARIANCE					
SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F	SIG.
BETWEEN GROUPS	718.9862	1	718.9862	30.1308	.0000
WITHIN GROUPS	8232.4489	345	23.8622		
ETA = .2834 ETA SQUARED = .0803					

CRITERION VARIABLE SUM37
BROKEN DOWN BY Q11122

ANALYSIS OF VARIANCE						
VALUE	LABEL	SUM	MEAN	STD DEV	SUM OF SQ	CASES
0		2563.0000	21.7203	5.6051	3675.7712	118
1		5779.0000	25.2358	4.3495	4313.2664	229
WITHIN GROUPS TOTAL		8342.0000	24.0403	4.8121	7989.0376	347

ANALYSIS OF VARIANCE					
SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F	SIG.
BETWEEN GROUPS	962.3976	1	962.3976	41.5603	.0000
WITHIN GROUPS	7989.0376	345	23.1566		
ETA = .3279 ETA SQUARED = .1075					

CRITERION VARIABLE SUM37
BROKEN DOWN BY Q11123

ANALYSIS OF VARIANCE						
VALUE	LABEL	SUM	MEAN	STD DEV	SUM OF SQ	CASES
0		2963.0000	22.1119	5.5178	4049.3209	134
1		5379.0000	25.2535	4.3925	4090.3099	213
WITHIN GROUPS TOTAL		8342.0000	24.0403	4.8573	8139.6308	347

ANALYSIS OF VARIANCE					
SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F	SIG.
BETWEEN GROUPS	811.8044	1	811.8044	34.4085	.0000
WITHIN GROUPS	8139.6308	345	23.5931		
ETA = .3011 ETA SQUARED = .0907					

CRITERION VARIABLE SUM37
BROKEN DOWN BY Q11124

ANALYSIS OF VARIANCE					
VALUE	LABEL	SUM	MEAN	STD DEV	CASES
0		803.0000	21.7027	7.1253	37
1		7539.0000	24.3194	4.7246	310
WITHIN GROUPS TOTAL		8342.0000	24.0403	5.0289	347

ANALYSIS OF VARIANCE					
SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F	SIG.
BETWEEN GROUPS	226.3216	1	226.3216	8.9490	.0030
WITHIN GROUPS	8725.1136	345	25.2902		
ETA = .1590 ETA SQUARED = .0253					

CRITERION VARIABLE SUM37
BROKEN DOWN BY Q11125

ANALYSIS OF VARIANCE					
VALUE	LABEL	SUM	MEAN	STD DEV	CASES
0		67.0000	11.1667	9.4745	6
1		8275.0000	24.2669	4.6938	341
WITHIN GROUPS TOTAL		8342.0000	24.0403	4.7972	347

ANALYSIS OF VARIANCE					
SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F	SIG.
BETWEEN GROUPS	1011.8863	1	1011.8863	43.9698	.0000
WITHIN GROUPS	7939.5489	345	23.0132		
ETA = .3362 ETA SQUARED = .1130					

CRITERION VARIABLE SUM37
BROKEN DOWN BY QIII26

ANALYSIS OF VARIANCE						
VALUE	LABEL	SUM	MEAN	STD DEV	SUM OF SQ	CASES
0		1438.0000	19.6986	5.2670	1997.3699	73
1		6904.0000	25.1971	4.3691	5211.3577	274
WITHIN GROUPS TOTAL		8342.0000	24.0403	4.5711	7208.7275	347

ANALYSIS OF VARIANCE					
SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F	SIG.
BETWEEN GROUPS	1742.7076	1	1742.7076	83.4036	.0000
WITHIN GROUPS	7208.7275	345	20.8949		
ETA = .4412 ETA SQUARED = .1947					

CRITERION VARIABLE SUM37
BROKEN DOWN BY QIII27

ANALYSIS OF VARIANCE						
VALUE	LABEL	SUM	MEAN	STD DEV	SUM OF SQ	CASES
0		870.0000	19.3333	6.0566	1614.0000	45
1		7472.0000	24.7417	4.5355	6191.8543	302
WITHIN GROUPS TOTAL		8342.0000	24.0403	4.7566	7805.8543	347

ANALYSIS OF VARIANCE					
SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F	SIG.
BETWEEN GROUPS	1145.5809	1	1145.5809	50.6319	.0000
WITHIN GROUPS	7805.8543	345	22.6257		
ETA = .3577 ETA SQUARED = .1280					

CRITERION VARIABLE SUM37
BROKEN DOWN BY QIII28

ANALYSIS OF VARIANCE					
VALUE	LABEL	SUM	MEAN	STD DEV	CASES
0		2107.0000	20.6569	5.3594	102
1		6235.0000	25.4490	4.2449	245
WITHIN GROUPS TOTAL		8342.0000	24.0403	4.5992	347

ANALYSIS OF VARIANCE					
SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F	SIG.
BETWEEN GROUPS	1653.8327	1	1653.8327	78.1863	.0000
WITHIN GROUPS	7297.6024	345	21.1525		
ETA = .4298 ETA SQUARED = .1848					

CRITERION VARIABLE SUM37
BROKEN DOWN BY QIII29

ANALYSIS OF VARIANCE					
VALUE	LABEL	SUM	MEAN	STD DEV	CASES
0		4883.0000	23.0330	5.2143	212
1		3459.0000	25.6222	4.4569	135
WITHIN GROUPS TOTAL		8342.0000	24.0403	4.9339	347

ANALYSIS OF VARIANCE					
SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F	SIG.
BETWEEN GROUPS	552.9330	1	552.9330	22.7138	.0000
WITHIN GROUPS	8398.5022	345	24.3435		
ETA = .2485 ETA SQUARED = .0618					

CRITERION VARIABLE SUM37
BROKEN DOWN BY Q11130

ANALYSIS OF VARIANCE						
VALUE	LABEL	SUM	MEAN	STD DEV	SUM OF SQ	CASES
0		568.0000	20.2857	7.1277	1371.7143	28
1		7774.0000	24.3699	4.7419	7150.3511	319
WITHIN GROUPS TOTAL		8342.0000	24.0403	4.9701	8522.0654	347

ANALYSIS OF VARIANCE					
SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F	SIG.
BETWEEN GROUPS	429.3698	1	429.3698	17.3822	.0000
WITHIN GROUPS	8522.0654	345	24.7016		
ETA = .2190 ETA SQUARED = .0480					

CRITERION VARIABLE SUM37
BROKEN DOWN BY Q11131

ANALYSIS OF VARIANCE						
VALUE	LABEL	SUM	MEAN	STD DEV	SUM OF SQ	CASES
0		4619.0000	22.3140	4.8814	4908.5894	207
1		3723.0000	26.5929	4.2526	2513.7929	140
WITHIN GROUPS TOTAL		8342.0000	24.0403	4.6383	7422.3822	347

ANALYSIS OF VARIANCE					
SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F	SIG.
BETWEEN GROUPS	1529.0529	1	1529.0529	71.0720	.0000
WITHIN GROUPS	7422.3822	345	21.5142		
ETA = .4133 ETA SQUARED = .1708					

CRITERION VARIABLE SUM37
BROKEN DOWN BY OIII32

ANALYSIS OF VARIANCE						
VALUE	LABEL	SUM	MEAN	STD DEV	SUM OF SQ	CASES
0		1878.0000	20.6374	5.2968	2525.0330	91
1		6464.0000	25.2500	4.4272	4998.0000	256
WITHIN GROUPS TOTAL		8342.0000	24.0403	4.6697	7523.0330	347

ANALYSIS OF VARIANCE					
SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F	SIG.
BETWEEN GROUPS	1428.4022	1	1428.4022	65.5053	.0000
WITHIN GROUPS	7523.0330	345	21.8059		
ETA = .3995 ETA SQUARED = .1596					

CRITERION VARIABLE SUM37
BROKEN DOWN BY OIII33

ANALYSIS OF VARIANCE						
VALUE	LABEL	SUM	MEAN	STD DEV	SUM OF SQ	CASES
0		2853.0000	20.8248	4.9317	3307.7956	137
1		5489.0000	26.1381	3.9754	3302.9952	210
WITHIN GROUPS TOTAL		8342.0000	24.0403	4.3774	6610.7909	347

ANALYSIS OF VARIANCE					
SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F	SIG.
BETWEEN GROUPS	2340.6443	1	2340.6443	122.1521	.0000
WITHIN GROUPS	6610.7909	345	19.1617		
ETA = .5114 ETA SQUARED = .2615					

CRITERION VARIABLE SUM37
BROKEN DOWN BY QIII34

ANALYSIS OF VARIANCE						
VALUE	LABEL	SUM	MEAN	STD DEV	SUM OF SQ	CASES
0		4910.0000	22.1171	4.7608	5008.9550	222
1		3432.0000	27.4560	3.6622	1663.0080	125
WITHIN GROUPS TOTAL		8342.0000	24.0403	4.3976	6671.9630	347

ANALYSIS OF VARIANCE					
SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F	SIG.
BETWEEN GROUPS	2279.4722	1	2279.4722	117.8690	.0000
WITHIN GROUPS	6671.9630	345	19.3390		
ETA = .5046 ETA SQUARED = .2546					

CRITERION VARIABLE SUM37
BROKEN DOWN BY QIII35

ANALYSIS OF VARIANCE						
VALUE	LABEL	SUM	MEAN	STD DEV	SUM OF SQ	CASES
0		307.0000	18.0588	7.4538	888.9412	17
1		8035.0000	24.3485	4.7500	7422.9242	330
WITHIN GROUPS TOTAL		8342.0000	24.0403	4.9084	8311.8654	347

ANALYSIS OF VARIANCE					
SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F	SIG.
BETWEEN GROUPS	639.5697	1	639.5697	26.5466	.0000
WITHIN GROUPS	8311.8654	345	24.0924		
ETA = .2673 ETA SQUARED = .0714					

CRITERION VARIABLE SUM37
BROKEN DOWN BY QIII36

ANALYSIS OF VARIANCE						
VALUE	LABEL	SUM	MEAN	STD DEV	SUM OF SQ	CASES
0		973.0000	19.8571	5.6199	1516.0000	49
1		7369.0000	24.7282	4.6555	6436.9832	298
WITHIN GROUPS TOTAL		8342.0000	24.0403	4.8013	7952.9832	347

ANALYSIS OF VARIANCE					
SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F	SIG.
BETWEEN GROUPS	998.4519	1	998.4519	43.3128	.0000
WITHIN GROUPS	7952.9832	345	23.0521		
ETA = .3340 ETA SQUARED = .1115					

CRITERION VARIABLE SUM37
BROKEN DOWN BY QIII37

ANALYSIS OF VARIANCE						
VALUE	LABEL	SUM	MEAN	STD DEV	SUM OF SQ	CASES
0		974.0000	20.2917	5.5350	1439.9167	48
1		7368.0000	24.6421	4.7518	6728.7090	299
WITHIN GROUPS TOTAL		8342.0000	24.0403	4.8659	8168.6257	347

ANALYSIS OF VARIANCE					
SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F	SIG.
BETWEEN GROUPS	782.8095	1	782.8095	33.0618	.0000
WITHIN GROUPS	8168.6257	345	23.6772		
ETA = .2957 ETA SQUARED = .0875					

CRITERION VARIABLE SUM37
BROKEN DOWN BY Q19

ANALYSIS OF VARIANCE						
VALUE	LABEL	SUM	MEAN	STD DEV	SUM OF SQ	CASES
1		7323.0000	24.2483	5.1812	8080.3742	302
2		857.0000	22.5526	4.5184	755.3947	38
3		141.0000	23.5000	1.2247	7.5000	6
WITHIN GROUPS TOTAL		8321.0000	24.0491	5.0776	8843.2689	346

ANALYSIS OF VARIANCE					
SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F	SIG.
BETWEEN GROUPS	98.8958	2	49.4479	1.9179	.1485
WITHIN GROUPS	8843.2689	343	25.7821		
ETA = .1052 ETA SQUARED = .0111					

* * * MULTIPLE CLASSIFICATION ANALYSIS * * *

		SUM37					
BY		QI1					
		QII1					
GRAND MEAN =		24.19					
VARIABLE + CATEGORY	N	UNADJUSTED DEV'N	ETA	ADJUSTED FOR INDEPENDENTS DEV'N	BETA	ADJUSTED FOR INDEPENDENTS + COVARIATES DEV'N	BETA
QI1							
1	70	-0.80		-0.86			
2	65	1.58		1.58			
3	207	-0.22		-0.20			
			0.17		0.17		
QII1							
1	103	0.18		0.22			
2	62	-0.16		-0.25			
3	177	-0.05		-0.04			
			0.03		0.04		
MULTIPLE R SQUARED						0.030	
MULTIPLE R						0.173	

* * * ANALYSIS OF VARIANCE * * *

		SUM37					
BY		QI1					
		QII1					
SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F		
MAIN EFFECTS	226.892	4	56.723	2.574	0.038		
QI1	221.631	2	110.816	5.029	0.007		
QII1	9.134	2	4.567	0.207	0.813		
2-WAY INTERACTIONS	33.701	4	8.425	0.382	0.821		
QI1 QII1	33.701	4	8.425	0.382	0.821		
EXPLAINED	260.593	8	32.574	1.478	0.164		
RESIDUAL	7338.053	333	22.036				
TOTAL	7598.646	341	22.283				

347 CASES WERE PROCESSED.
5 CASES (1.4 PCT) WERE MISSING.

Pearson Correlation Coefficients

	QI 1.1	QI 1.2	QI 1.3	Total # of Teachers Evaluated
SUM37	-.2386 (71) p=.023	.0279 (65) p=.413	.0959 (211) p=.083	.1063 (347) p=.024
PROCESS	-.2213 (71) p=.032	.1053 (65) p=.202	.0722 (211) p=.148	.1648 (347) p=.001
IMPRVT	-.2505 (71) p=.018	.0465 (65) p=.356	.1015 (211) p=.071	.0987 (347) p=.033
TEACH	-.2380 (71) p=.023	.0838 (65) p=.253	.1237 (211) p=.036	.0465 (347) p=.192

Pearson Correlation Coefficients

	QI2	QI3	QI4	QI5	QI10
SUM37	-.0067 (347) p=.450	.1445 (347) p=.004	.0311 (347) p=.282	.0773 (347) p=.075	-.0576 (345) p=.143
PROCESS	.0147 (347) p=.392	.1518 (347) p=.002	.0887 (347) p=.049	.1507 (347) p=.002	-.0301 (345) p=.289
IMPRVT	-.0128 (347) p=.406	.0883 (347) p=.050	.0554 (347) p=.152	.0644 (347) p=.116	-.0690 (345) p=.100
TEACH	-.0031 (347) p=.477	.0273 (347) p=.306	.0508 (347) p=.173	.0285 (347) p=.299	-.0651 (345) p=.144
	QII1	QII4	QII5	QII6	QII7
SUM37	-.2149 (347) p=.000	.1286 (327) p=.010	.2975 (338) p=.000	-.0930 (308) p=.052	-.1092 (340) p=.022
PROCESS	-.2348 (347) p=.000	.1081 (327) p=.025	.2950 (338) p=.000	-.0520 (308) p=.181	.1601 (340) p=.002
IMPRVT	-.1881 (347) p=.000	.1512 (327) p=.003	.2853 (338) p=.000	-.0462 (308) p=.210	.0825 (340) p=.064
TEACH	-.1145 (347) p=.017	.1873 (327) p=.000	.2725 (338) p=.000	-.0302 (308) p=.299	.0868 (340) p=.055

N.L.C. - B.N.C.



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